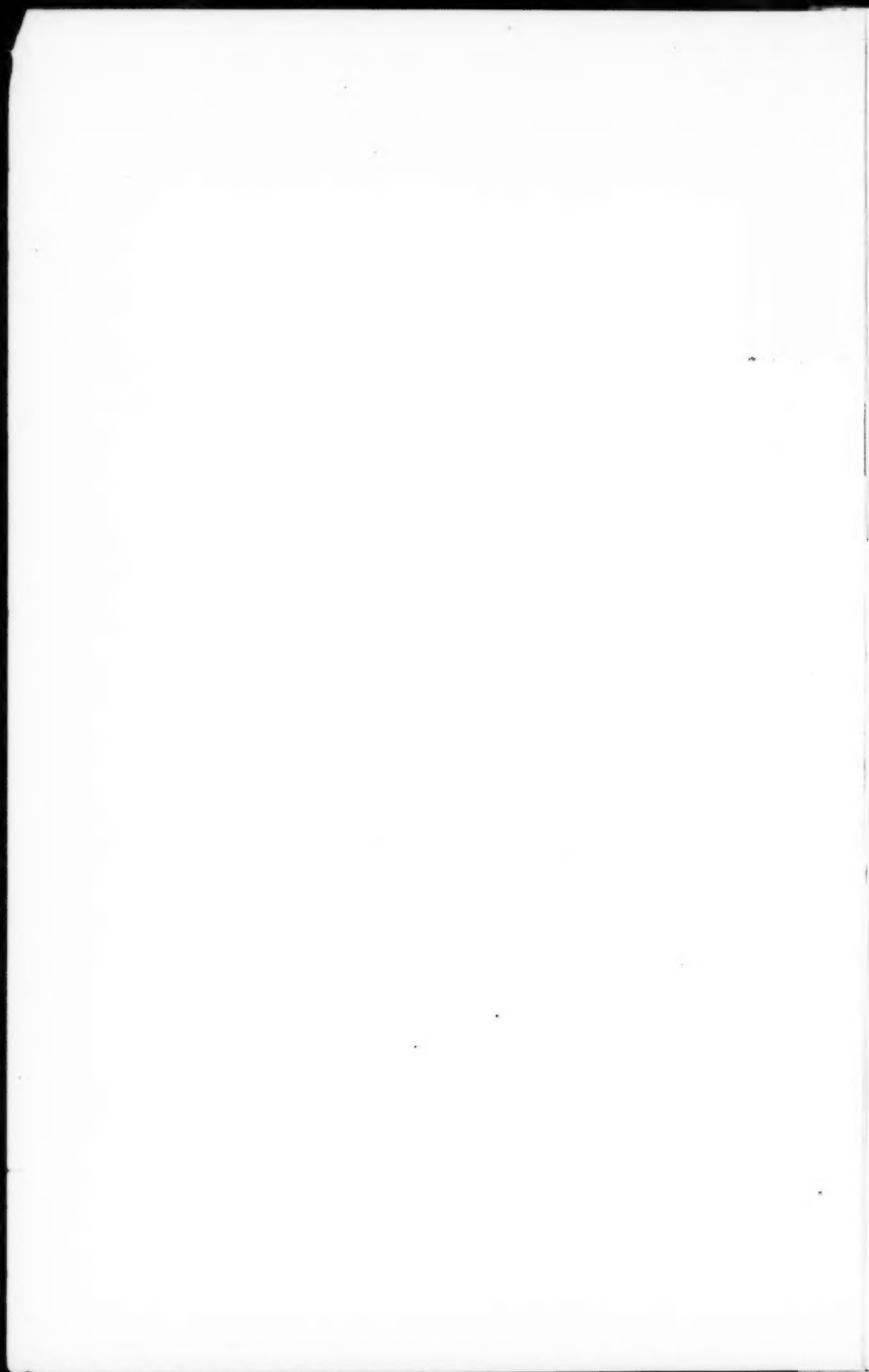


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CERTAIN SOURCES OF CORRUPTION IN LATIN
MANUSCRIPTS:

A STUDY BASED UPON TWO MANUSCRIPTS OF LIVY: CODEX
PUTEANUS (FIFTH CENTURY), AND ITS COPY CODEX REGI-
NENSIS 762 (NINTH CENTURY)¹

I. INTRODUCTION

THE tendency of Latin textual criticism has in late years been more and more in the direction of a conservative adherence to the authority of manuscripts, wherever possible. This may be seen in the gradually diminishing number of emendations and conjectures in the critical apparatus of recent editions of the Latin texts. Scholars now hesitate much longer about marking a word or an expression as corrupt merely because it is unusual. Confidence in all but very late manuscripts is on the increase. Recent years have seen the reinstatement of not a few manuscript readings whose place had long been taken by conjectures. A knowledge of palaeography is more and more becoming an essential factor in textual criticism, and, except in the case of texts which depend wholly upon manuscripts of the fourteenth and fifteenth centuries,

¹ In this article, which will appear in successive numbers of the *JOURNAL*, these topics will be discussed, each in a separate chapter: I. Introduction; II. Codex Reginensis 762; III. Mistaken Word-divisions; IV. Dittography; V. Errors of Omission; VI. Confusion of Letters; VII. Confusion of Similar Words; VIII. Corruptions arising from Mistaking the Numeral Signs; IX. Errors due to Abbreviations; X. Errors due to Corrections in the Codex Puteanus; XI. Errors of Conscious Emendation; XII. Spelling and Pronunciation; XIII. Miscellaneous Examples illustrating the Cumulative Growth of Corruptions.

one of the chief tests of an emendation is coming to be,—
Is it capable of palaeographical explanation?

This tendency to place textual criticism more nearly upon a palaeographical basis has not been accompanied by a corresponding change in the character of the illustrative material used in books and manuals upon the subject. The collections of examples now placed before the student are not without their value, but they fail along the lines in which textual criticism has made the greatest advance. These examples consist for the most part in (1) a comparison of the corrupt reading of a manuscript with a conjectured emendation of a scholar, or (2) in a comparison of the readings of two or more manuscripts of the same author, of which the relationship is generally uncertain, or at least remote. Illustrations chosen according to either method are often misleading to the student, even granting that, in the first method, the scholar's conjecture is what the author actually wrote. A great many corruptions to be found in manuscripts of all periods are no longer in their initial stages, but are the complex result of several distinct processes of growth. The student, with nothing before him but what the author is *supposed* to have written and the corrupt reading of, let us say, a thirteenth century manuscript, may be dealing only with a corruption in a late stage. All the earlier steps are missing, and certainty with regard to them is out of the question. Such an illustration has little value for him, leading as it does to no conclusion which is surely right, and possibly to one which is wholly wrong. Likewise, neither of these methods keeps clearly before the student the character of the errors common to certain *styles* of writing and certain *periods* of time. Both of them are lacking in palaeographical details.

To be of the greatest practical value, illustrations of corruptions should fulfil the following conditions: (1) the two extremes which are compared should not be too widely separated; (2) neither of them should be based upon conjecture; (3) each illustration should present but a single stage in the

progress of an error, or at any rate should present but one stage at a time; (4) the cause of the error should be reasonably certain; (5) each example should keep distinctly before the student the periods of time and the palaeographical conditions involved. Material for illustrations which would answer all these conditions is not entirely wanting, though little use has heretofore been made of it. It is to be found in a class of neglected manuscripts whose readings have no place in the critical apparatus of the text editions, namely, direct copies of originals which are still extant. The circumstance which renders such copies useless for the constitution of the text of a given author makes them of the greatest value in throwing light upon the history of the texts in general. By comparing such a copy with its original it is possible, as it were, to look over the shoulder of the mediaeval scribe as he sits at his task. One may follow his hand and eye as he copies letter by letter and word by word. The difficulties with which he has to contend either in the script or the text of his original are clearly revealed. It is possible to see exactly how he performed his work, whether faithfully or carelessly, whether he has adhered closely to his text or altered freely, and, when he has made errors, how and why they came to be made. The extent to which the text suffered in his hands is thus made clear in every detail. Illustrations taken from the readings of two such manuscripts, original and copy, would enable the student to draw his own conclusions with full data before him,—the style of the script of the original, the date of each manuscript, the conditions under which the copy was made, and the knowledge that, in the case of corruptions, he is dealing with but a single stage. By this method it is possible to see exactly what, in the copying of a given manuscript, *actually happened*, and then to turn the information to account in considering the texts of other manuscripts produced under the same conditions, the originals of which are now lost.

Examples chosen by this method are as nearly as possible upon a palaeographical basis, and offer the student definite

illustration. The comparison of a single pair of representative manuscripts and the errors arising from a single process of transcription would serve to give him a clear idea of the tendency to corruption at a given period. A study of the errors exhibited in four such sets of copies and originals, each set representing a distinct phase of the history of Latin texts, would give him a more definite conception of the whole field than he can possibly get from the more or less random examples of the manuals. For instance, a ninth century copy of an original of the fourth or fifth century, an eleventh century copy of an original of the ninth, a thirteenth century copy of an original of the eleventh, and a fourteenth or fifteenth century copy of an original of the thirteenth, would serve respectively to illustrate the tendencies of the periods which they represent, and collectively the entire history of Latin texts in so far as extant manuscripts make this possible.

For the last three of these four periods there is no lack of illustrative material of the nature indicated. A search in the libraries would probably disclose an abundance of neglected copies of extant manuscripts. The first of these periods, which is in many respects the most important, is represented, so far as I am aware, only by the single pair of manuscripts which form the subject of the present article. These are (1) the famous codex *Puteanus* (National Library, Paris, 5730), of the fifth century, which contains the third decade of Livy's history, and (2) a ninth century copy of it now in the Vatican library, and catalogued as *Reginensis* 762.

That the significance of these two manuscripts may be properly understood, let me first point out some of the characteristics of the period to which they belong, and the representative nature of the manuscripts themselves. The epoch from the fifth century to the ninth is one which is unique in the history of the texts of the Classical Latin authors. It is marked by a period of almost total inactivity in the multiplication of copies of their works, and is followed by one of unparalleled activity. Almost all of our extant manuscripts of these writers that

are earlier in date than the very end of the eighth century are the capital and uncial manuscripts of the fourth, fifth, and the beginning of the sixth centuries. The interval from the middle of the sixth century to the closing years of the eighth is represented by very few existing manuscripts of any but the Church writers. This fact would seem to indicate that, while there was no lack of activity in the reproduction of the writings of the Christian fathers, the copying of the works of the pagan Latin writers was almost totally arrested for over two centuries.¹ The active production of copies of the works of the pagan writers begins anew with the revival of learning under Charlemagne. To this new and wonderful activity, which arose with the closing years of the eighth century and continued through the tenth, we are indebted for the preservation of a large proportion of our Latin texts.² The task of copying was

¹ Of the authors who wrote before the official victory of Christianity the following works are, to the best of my knowledge, the only ones which have been preserved in manuscripts surely belonging to this period: the Agrimensores, s. VI-VII; Apuleius (?), *de Herbarum Medicaminibus*, s. VI-VII; Ovid, *ex Ponto* (fragment), s. VI-VII; the Pandects, s. VI-VII; Probus (?), *Catholica*, s. VI-VII, VII-VIII, VIII-IX; excerpts from Pliny and Apicius, s. VII-VIII; Censorinus, s. VII; Lactantius, s. VII; Sacerdos, s. VII-VIII; Commodianus, *Carmen Apologeticum*, s. VIII; *Notae Tironis et Senecae*, s. VIII; the Anthology of the Codex Salmasianus, s. VII-VIII. Of these, Commodianus and Lactantius were Christian writers; Probus, Censorinus, and Sacerdos were writers on Grammar; the works of the Agrimensores, the above-mentioned work on *Materia Medica* ascribed to Apuleius, the excerpts from Pliny and Apicius, the Pandects, and the *Notae Tironis et Senecae* were all of a technical or semi-technical nature. It would seem probable, then, that with few exceptions such manuscripts only were copied in the seventh and eighth centuries as, from the nature of their subject-matter, did not conflict with the doctrines of the Church.

² The oldest manuscripts of a large proportion of the extant literature from Plautus to the official victory of Christianity are of the ninth and tenth centuries. The following is a list of the works of which the text is based upon manuscripts of this period (viz., the ninth and tenth centuries, and the last decade of the eighth): Plautus (the Codex Vetus for portions not contained in the Ambrosian palimpsest); Lucretius; Catullus, c. 62; Caesar; Sallust; *Rhetorica ad Herennium*; the following works of Cicero: *Pro Fonteio*, *pro Flacco*, *post reditum in senatu*, *post red. ad Quirites*, *de domo sua*, *de haruspicum responsis*, *pro Sestio*, *in Vatinius*, *pro Caelio*, *de provinciis consularibus*, *pro Balbo*, *in Pisonem*, *pro Marcello*, *Philippics*, *Rhetorica*, *de Oratore*, *Brutus*, *Orator*, *Part. Orat.*, *Topica*, *ad Familiares*, *de Legibus*, *Paradoxa*, *Academica Priora*, *Tusc. Disp.*, *de Natura Deorum*, *Cato Maior*, *de Divinatione*, *de Fato*,

performed by monks. The usual practice in the scriptoria of the various monasteries in the ninth century seems to have been to secure, for the purpose of making a copy, the oldest available manuscript of a given author either preserved in the library to which the scriptorium belonged, or borrowed from that of another monastery. The oldest available manuscripts were, in the case of the pagan writers, those of the fourth or fifth century in capital¹ or uncial writing. Consequently the three hundred years from the end of the fifth century to the beginning of the ninth represent but a single link in the history of the texts of those Latin authors whose writings are preserved in manuscripts not earlier than the ninth century. In all that time the text of such an author has passed through but a single stage in the process of corruption. The errors which have crept into the text in the making of the ninth century copy constitute the only difference between the trustworthiness of a ninth century manuscript of a given author and that of its archetype of the fifth.

This single process of transcription marks what is perhaps

Timaeus, *de Amicitia*, *de Officiis*; the *Culex*, *Copa*, *Aetna*, and *Moretum* formerly ascribed to Virgil; Bernese scholia on Virgil; Horace; Ovid, *Amores*, *Heroides*, *de Medicamine Faciei*, *Ars Amatoria*, *Remedia Amoris*, *Fasti*, *Metamorphoses*, *ex Ponto* (for the greater part), *Halientica*; Grattii *Cynegetica*; Livy, first decade, with the exception of books III-VI, and the *Periochae*; Justinus; Seneca Rhetor; Verrius Flaccus (*Epitome Pauli*); Hyginus; Vitruvius; *Aratea* Germanici; Manilius; Phaedrus; Seneca, *Tragoediae* (excerpta), *Ἀποκολοκύνωσις*, *Dialogues*, *Epistolae*, *de Clementia*, *de Beneficiis*; Valerius Maximus; Curtius Rufus; Persius; Lucan; Quintilian; Calpurnius Flaccus; *Rias Latina*; Petronius; Valerius Flaccus; Statius; Martial; Juvenal; Tacitus, *Annals* I-VI; Pliny's *Letters*; Pliny the elder; Pomponius Mela; Celsus; Columella; Apicius; Marcellus; Frontinus (except the *de Aquis*); Siculus Flaccus; Nemesianus, *Cynegetica*; *Disticha* and *Monosticha* Catonis; Suetonius; Minucius Felix; Florus, *Bell. Rom.*; Apuleius, *de Platone et eius dogmata*; Calpurnius Flaccus; Terentius Scaurus; Gargilius Martialis; Flavius Caper; Acro; Porphyrio; Gellius; Maecianus; Cyprian; Tertullian; Q. Sereus Sammonicus; Scriptores Historiae Augustae; Arnobius. Roughly speaking, this list includes considerably more than half of the extant classical literature, and the ratio of ninth century authoritative manuscripts upon this list to those of the tenth century is about 3 to 1. This shows how important a place the ninth century holds in the preservation of the texts.

¹ Capitals were reserved for favourite authors, Virgil in particular.

the most critical period in the history of Latin texts. It is not in itself characterized by intentional alterations such as are common in manuscripts of the fourteenth and fifteenth centuries. The corruptions are due almost entirely to ignorance or carelessness on the part of the scribes, much more rarely to attempts at emendation. But, although serious corruptions are few, this period is rich in the germs of future corruptions, on account of a new factor in the making of manuscripts. This factor is the division of the text into words, which now for the first time comes into general practice. In the manuscript of the fifth century there was ordinarily no word-division whatever. The fifth century scribe, if he did not understand the meaning of the text before him, was able to conceal his ignorance and evade all difficulties resulting therefrom by copying letter by letter, a process in which the text of the author suffered but little. The scribe of the ninth century, on the other hand, was forced to make words out of the undivided text of his original, and, with only a superficial understanding of the sense of what he was copying, it is not surprising that he often divided wrongly. The errors thus made are not in themselves difficult to emend, but, simple though they were, they frequently became magnified into grave corruptions in the efforts of the scribes of a later age to restore sense to the passages thus distorted.

Of this important process of transcription no manuscript could be more thoroughly representative than the *Reginensis* 762. The *Puteanus*,¹ from which this copy was made, is a typical manuscript of the fifth century, in uncial script, with words undivided. The *Reginensis* itself is one of the very best examples of the work of the French monasteries at the beginning of the ninth century.² The centre of the new activity in the production of manuscripts, and of the reform in writing which began with the closing years of the eighth century and spread over a large part of Western Europe, was the monastery

¹ For a full description see Introd. to the text edition of A. Luchs.

² A fuller description of the manuscript is given in chap. II.

of St. Martin at Tours. Its abbot Alcuin, who was Charlemagne's minister of education, was the pioneer of the new movement. It was in this monastery that the *Reginensis* was produced, a few years after Alcuin's death. It is written in the reformed script known as the Caroline minuscule. This manuscript is not the work of a single scribe. Eight monks were simultaneously engaged upon it, who, to judge from their orthography, were of more than one nationality. It consequently represents the concentrated efforts of the scriptorium of St. Martin's at the time when this monastery was the centre of the ninth century revival, which was then at its height.

In the present article I have endeavoured to illustrate the tendencies to corruption which characterize the transcription from manuscripts in majuscule writing into Caroline minuscule with divided words, by means of actual examples of scribal errors drawn from a comparison of the readings of the *Puteanus* with those of its copy the *Reginensis*. Since collating the manuscripts in 1896 I have made use of the material collected, in giving courses in Latin palaeography. The results encourage me to believe that the collection may prove helpful to other students and give a clearer idea of the errors common to this important period than they now get from the illustrations in the manuals, which are drawn from miscellaneous sources. The starting-point of the error is in every case certain, being simply the reading of the *Puteanus*. The cause of each error is therefore in the majority of cases beyond dispute. As I have already said, the *Reginensis* is the work of eight scribes, seven of whom have each copied a quota amounting to considerably more than a book of Livy's text. Among them more than one nationality is probably represented. For this reason the errors here given represent the tendencies of the period much more fairly than if they had been drawn from the work of a single scribe.

For convenience of reference, the examples in the following chapters are arranged in categories, with a minimum of commentary on each variety of error. The reading of the *Puteanus*

is usually given first, followed by the erroneous reading in the *Reginensis*. Henceforth the *Puteanus* will be represented by the letter P, and the *Reginensis* by the letter R.¹

To illustrate several stages in the progress of an error I have occasionally made use of the corrections found in both manuscripts. Corrections in P are designated as follows: P¹, if the correction is by the scribe, P², if by the first corrector, P³, if by the second corrector.² Correctors in R are much more difficult to discriminate, owing to the variety of inks and hands (see chaps. II and XI). For our present purpose it will suffice to designate the corrections made by the scribe as R¹, and all later corrections as R². For the purpose of tracing a stage further the corrections begun in the *Reginensis*, I have added in a limited number of cases the readings of *Codex Medicus* (Florence, Laurentian Library, LXIII, 20), which is in turn a copy³ of R. This manuscript will be indicated by the letter M. In all the examples in which I have given several steps in the progress of an error I have tried to keep each stage distinct.

The following exposition is intended, in a general way, to cover all the points of consequence afforded by the study of the two manuscripts. Accordingly, while this paper contains certain new facts and points of view, it of course has also to deal with many that are already familiar—with the special advantage, however, as already shown, that the two points of comparison in each case are actual examples drawn from two extant manuscripts, of which one is the direct copy of the other.

¹ This letter is used by A. Luchs to denote another manuscript of this decade of Livy, in the Spirensian group. No confusion, however, can result, inasmuch as in the present article we are concerned with but three manuscripts, all of which belong to the *Puteanus* group.

² All the corrections in P designated by Luchs as P⁴, P⁵, were made after R had been copied.

³ Although M is in the main a copy of R, its readings seem to indicate, especially in the early portion of the manuscript, that the scribe who copied it had also before him either P or some copy of it other than R. This is a matter which I hope to deal with in another paper.

I desire to acknowledge my indebtedness to Professor Wm. Gardner Hale, who suggested this piece of work to me while director of the American School of Classical Studies in Rome (1895-96), and to state, at his request, that his attention was called to the availability of these two manuscripts for the present purpose by Professor W. M. Lindsay, now of the University of St. Andrews. To Professor Hale, and to Professor Frank Frost Abbott of the University of Chicago, I am also deeply grateful for many valuable criticisms.

II. THE CODEX REGINENSIS 762

I have already given in the preceding chapter a general account of R, but my description of it was there confined merely to such points as directly concerned the purpose of the present article. Before proceeding to deal with the errors of its scribes, I shall first give a more detailed account of this manuscript and its making, concerning which a great many more data are known than is usual in the case of manuscripts of so early a date.

Being a copy of an existing original, and more mutilated¹ than the original both at the beginning and at the end, it is of no value for the constitution of the text of the third decade of Livy, though the readings of M, its eleventh century copy, are to be found in the apparatus of the critical editions for the beginning of Book XXI, which is missing in P. But from a purely palaeographical standpoint it is much more interesting than either the *Puteanus* (P), or its own copy, the *Mediceus* (M), and has been the subject of various articles by palaeographical scholars, among whom are Wölflin,² Chatelain,³ and Traube.⁴ Its interest lies not merely in the fact that it is one of the best

¹ It begins with the words *velut caeci evadunt* (XXII, 6, 5), and ends with *deinceps continua amplexus* (XXX, 5, 7).

² *Philologus*, XXXIII, 1874, pp. 186-189.

³ *Revue de Philologie*, vol. XIV, 1890, p. 79; *Paléographie des Classiques Latins*, 9^e livraison, 1895, with facsimile.

⁴ L. Traube, *Sitzungsberichte der Münchener Akademie*, 1891, Heft 3, p. 425.

examples of the developed calligraphy of Tours, but also in the interesting data furnished by the signatures at the end of the various quaternions, which throw no little light upon the method of procedure in manuscript-making in the Middle Ages.

These signatures occur regularly at the end of each quaternion, as follows: Gysla~~n~~^x, fol. 6; Aldo, fol. 16, 24, 32, 40, 48, 52; Frede~~g~~, fol. 60, 68, 76, 84, 92, 97; Nauto, fol. 103, 111; Theogrīn or Theogrīnūn, fol. 119, 127, 135, 141; Theodegrī, fol. 157, 165, 173, 179, 185; Ansoald, fol. 193, 201, 209, 217, 228; Landemarus, fol. 236, 242, 250; each folio being signed upon the *verso* side. The manuscript was therefore the work of eight different scribes, each of whom, to judge from the amount done by those whose work is preserved to us in its entirety, copied about forty-four folios of the text, with the exception of Nauto¹ and Theogrīnūn, who *together* copied that number. Chatelain noticed² that the end of the work of Gyslarius corresponded, even to a syllable, with the end of quaternion IX of P; that of Aldo, with the end of quaternion XVIII; that of Frede~~g~~, with quaternion XXVII; that of Nauto and Theogrīnūn together, with quaternion XXXVI; that of Theodegrī, with quaternion XLV; that of Ansoaldus, with quaternion LIV; and that the writing of the last page of the work of each scribe was spread out or condensed so as to coincide with the end of the quaternion of P. He concluded, therefore, that the old fifth century uncial manuscript had been taken apart, and equal portions, of nine quaternions each, had been given out to the scribes to be copied simultaneously. It has further been pointed out by Traube (*Sitzungsberichte der Münchener Akademie*, 1891, Heft 3, p. 425), that the names of these scribes are to be found in the *Libri Confraternitatum Sancti Galli*³ in the list of the monks of Tours, and that they all occur in a definite place upon the list, namely, in the second

¹ The work of Nauto stops abruptly about two-thirds of the way down a page (fol. 112 *recto*), and his part was completed by the scribe whose signature was Theogrīnūn.

² *Revue de Philologie*, vol. XIV.

³ Ed. Piper, *Mon. Germaniae*.

of the seven columns devoted to the monks of St. Martin's of Tours. From this he infers that in the monastery of St. Martin there was a definite class of monks who performed the duty of scribes, and were regularly engaged as such in the scriptorium of the monastery. The names corresponding to the signatures are as follows:

| Signatures in R | List in Col. 14, <i>Lib. Confr. S. Galli</i> |
|-----------------|--|
| Gyslaŋ | Gislarius (no. 3) |
| Aldo | Aldo (no. 10) |
| Fredeġ | Fredegandus (no. 37) |
| Nauto | Nauto (no. 36) |
| Theogriŋ | Teutcrimus (no. 26) |
| Ansoaldus | Ansoaldus (no. 4) |
| Landemarus | Landemarus (no. 24) |

It will be seen that one name is missing, namely, the one corresponding to the signature Theodegrī, but it is just possible that Theogriŋ and Theodegrī were one and the same person. Nauto did not finish his full quota of nine quaternions, but stopped abruptly two-thirds of the way down fol. 112 *recto*, after having completed a little over two quaternions. It is possible that Theodegrī, after finishing his own portion, completed that of Nauto, using a different abbreviation in his signature. The abbot at the head of the list of monks of St. Martin's in the *Libri Confraternitatum* is Fridegisus,¹ the successor of

¹ Chatelain, in his *Paléographie des Classiques Latins* (9^e livraison), gives one the impression that the scribe whose signature was Fredeġ, and Fridegisus the abbot, were one and the same person. In the hope that this might prove to be the case, and that I should find in the copy of the third of the scribes the work of a great Carolingian scholar, I studied that part of the manuscript with particular care. There was nothing, however, in the work of the scribe Fredeġ to distinguish it from that of the other scribes. It contained even more than the average number of careless or ignorant blunders, and this portion of the copy could hardly have been made by a man who had a reputation for learning. Other considerations also add to the probability that the abbot was not the copyist. It is hardly likely that the chancellor of Louis le Débonnaire could find time to copy manuscripts with the monks in the scriptorium; and, even if that were probable, he would have chosen the first part of the work in preference to the third. I agree, therefore, with Traube in identifying the scribe whose signature is Fredeġ with Fredegandus, whose name is number 37 in column 14 of the *Libri Confraternitatum*.

Alcuin, who held the abbacy from 804-834. Traube is consequently justified in placing the date of R between those years. The fact that all these scribes were monks of Tours makes it certain that the work of transcribing was done at Tours; for it is not likely that so many monks would be sent to Corbie to copy the *Puteanus*, which at this time belonged to the monastery of that town. It is much more probable that the uncial manuscript was borrowed¹ for copying, and this supposition would account for the haste shown in putting so many scribes to work upon making the copy, — the concentration, apparently, of the energies of the entire scriptorium upon this one task.

In R we have, therefore, an example of the developed calligraphy of Tours, produced within thirty years of the death of Alcuin. This monastery was, under his abbacy (from 796 to 804, the year of his death), the centre of the new activity in the production of manuscripts and of the reform in writing which spread over almost the whole of western Europe.² The manuscript should therefore be thoroughly characteristic of the new movement, not merely in the style of the writing, but also in respect to the fitness of the ninth century monks for the task of copying the texts of the old Latin writers. In the handwriting of these eight scribes there is little variation. It is almost impossible in the case of several of them to distinguish at first sight the hand of one from that of another, which goes to show that, in this one scriptorium at least, the Caroline minuscule had been brought as nearly as possible to uniformity. On the other hand, it would seem that greater attention was given to uniformity in handwriting than in other features of the work of the copyist. In these there is considerable disparity. For instance, the signature of Theogrîñ is attached to the quaternion which ends with fol. 119v; but by means of the character of the errors, aside from the writing, one can see

¹ Chatelain suggested this probability before Traube discovered that the scribes of the *Reginensis* were to be identified with the monks of the monastery of St. Martin at Tours.

² Exceptions to this statement are England and Ireland and the monasteries of southern Italy.

that the whole quaternion, and nearly a folio in addition, is not the work of the monk whose name is signed to it, but that of Nauto. The three quaternions copied by this scribe are relatively free from errors, while the quaternions signed with the names of Theogrīn, Theodegrī, Ansoaldus, and Landemarus are full of absurd blunders. These last-mentioned scribes are each prone to errors which are peculiar to themselves, a fact which, together with variations in orthography which are constant with certain scribes, would seem to indicate that more than one nationality was represented. The majority of the errors found in the manuscript are, however, common to all. They are due, for the most part, to carelessness, to a defective knowledge of Latin that was not sufficient to enable the scribe to understand, except in a more or less random way, the meaning of the text he was copying, and to difficulties arising from lack of familiarity with the continuously written uncial script. Their work shows almost no intentional alteration, and the emendations are of the most superficial nature; indeed, the majority of the scribes did not sufficiently understand the meaning of the text to have been equal to any deliberate emendation of consequence. The errors, though numerous, are in themselves unimportant, but in the hands of scribes of a later age they would undoubtedly have become magnified into serious corruptions.

Each quaternion of the *Reginensis* was corrected, as soon as it was completed, by some person or persons who supervised the work of the scriptorium. This is shown by the similarity between the ink of the correctors and that used by the scribes, and the non-recurrence, in the second quaternion of each scribe's work, of errors which were common in the first. These corrections, which will be treated in a subsequent chapter, are usually of a superficial nature and, in point of scholarship, are not much above the level of those made by the scribes themselves.

It was my first intention to give, along with each scribal error contained in the following chapters, the initial of the

name of the scribe by whom the error was made. The insertion of so many initials, however, seems likely to cause unnecessary confusion. I have therefore indicated in the accompanying table the exact portion of Livy's text copied by each scribe. In the case of each error the number of book, chapter, and section is given, and by referring to this table it will be possible to see at a glance the name of the scribe by whom a given error was made.

INDEX OF PORTIONS COPIED BY THE VARIOUS SCRIBES

- XXII, 6, 5 *velut caeci evadunt* to XXII, 21, 2 *sed praeterquam quod* copied by Gislarius.
 XXII, 21, 2 *ipsorum Hispanorum* to XXIII, 35, 1 *cum post Can-[nensem]* copied by Aldo.
 XXIII, 35, 1 [*Can-*]nensem pugnam to XXV, 9, 10 *alia portam Tem-[enitida]* copied by Fredeğ.
 XXV, 9, 10 [*Tem-*]enitida adiret to XXV, 39, 14 *cum Hasdrubale* copied by Nanto.
 XXV, 39, 14 *dece (= decem) millia* to XXVI, 28, 4 *Galliae et le-[gionibus]* copied by Theogrî.
 XXVI, 28, 4 [*le-*]gionibus praesset to XXVII, 38, 6 *cum omnes cense-[rent]* copied by Theodegrî.
 XXVII, 38, 6 [*cense-*]rent primo to XXVIII, 35, 7 *quod pleni-[us]* copied by Ansoaldus.
 XXVIII, 35, 7 [*pleni-*]us nitidiusque to XXX, 5, 7 *deinceps continua amplexus* copied by Landemarus.

III. MISTAKEN WORD-DIVISIONS

The comparative freedom of Capital and Uncial manuscripts from serious corruptions is due in large measure to the fact that the words of the text were usually¹ not divided. The letters of the text were written one after the other, with no interruption except an occasional break to indicate the paragraph: consequently it was never absolutely necessary for the scribe in making his copy to follow the sense of what he was copying. He might evade all difficulties arising from his own ignorance

¹ In the poem on the battle of Actium, found at Herculaneum, and in some early Virgil manuscripts, the words, though not spaced, are divided by points. This however was exceptional.

or from corruptions in his original, by simply writing the letters one by one without puzzling over the words they formed. He might indeed, as he copied, make wrong mental divisions of the words; but, if he did not in forming such wrong mental divisions also add, omit, or change a letter, his error could not in any way affect the text of his copy.

With the closing years of the eighth century, however, as a result of the Caroline reform, it became the regular practice to write each word separately. The Carolingian scribe, when set to make a copy of a continuously written majuscule manuscript, was forced to write his copy not letter by letter, but word by word. To do this rightly demanded a knowledge of the context, and the ability to read and understand Latin,—in which, as examples will clearly show, the eight scribes of R were anything but proficient. Their work is consequently full of wrong divisions of words, both where the sense of the passage was perfectly plain, and where corruptions in the original made the division really difficult. When in doubt, the scribes occasionally left the words undivided; but, as a rule, they resorted more or less blindly to some random grouping of the letters.

Errors of this nature form by far the largest class of the mistakes made by the scribes of R, and many of the illustrations given under other headings can be indirectly traced to this source. These errors due to wrong division of words are in themselves comparatively insignificant, and, were the *Puteanus* lost, the emendation of this class of corruptions in the *Reginensis* would present little or no difficulty to a modern scholar. But the serious aspect of such errors is that they form the starting-point of further and more formidable corruptions in eleventh, twelfth, and thirteenth century copies of ninth century manuscripts. The scribes of a later age had education enough to recognize that there were errors, but not sufficient knowledge or care to rectify them; and, in the superficial attempts which they made at restoring sense to the passages, all clues by which they might be emended by more careful scholars were frequently lost.

Before proceeding to take up in detail the various kinds of error arising from this source, I shall first give a few examples, chosen at random, of some of the more absurd word-divisions, in which the efforts of the scribes have resulted in nonsense, or in combinations of letters which do not form Latin words.¹

XXV, 11, 3 uallo urbem ab arce *intersaepire* statuit P, inter saepi restatuit R. — XXV, 11, 14-15 censebant esse. Punicas enim . . . P, censebantes sepunicas enim R. — XXV, 11, 17 haut magna mole P, haut magnam ole R. — XXV, 18, 11 pertulere (perpulere *Luchs*) turmales P, per tuleretur males R. — XXV, 40, 2 uertit. Visebantur enim . . . P, uertitui seabantur enim R. — XXV, 40, 6 ita peruagatus est hostium *agros ita socios* ad retinendos P, agrositas ocios R. — XXVIII, 25, 7 talia quaerentes (querentes *Luchs*) aequa orare seque ea . . . P, talia quaerentisae quaorares eque ea R. — XXVIII, 4, 2 frumentum *conuehere tela* arma parare P, conueheret ela R. — XXVIII, 5, 1 *mandata masinissae* scipioni exponit P, mandatam asinis sae R. — XXVIII, 8, 9 qui cum magno piaculo sacrilégii . . . P, magnopia culosacri legii R.

The first four of these examples have been selected from the portion copied by the scribe Nauto. He was the most careful of all the scribes in the matter of dividing words. In his three quaternions there are many more word-divisions quite as absurd as the four just given, and in the work of the other scribes they occur several times to the page. All of these examples are taken from a context in which the sense is perfectly clear. The scribes appear not to have grasped it and seem to have divided the letters at random.

Many of the errors of this class admit of no explanation except that of stupidity on the part of the scribe, but the greater number may be grouped into certain broad classes according to the conditions under which the errors occur.

¹ In giving the readings of P. I shall divide the words as they are divided in the printed texts. The reader will, however, understand that they are undivided in the manuscript. Where much of the context is given I have put in italics the part which is wrongly divided in R.

The easiest and simplest form of error in the division of words is to be found in the case of groups of letters which admit of being divided in two different ways, both of which give actual Latin words, *e.g.* XXVIII, 36, 8 ad muros tumultu maiore *quam ui subierunt* P. Here the scribe Landemarus has written *quam uis ubi erunt*. He was satisfied with having made four Latin words and did not stop to think of the sense of the passage.

Other examples are : XXII, 25, 14 si penes se summa imperii *consilique sit* P, consilii *quesit* R. *Quesit* is no doubt meant for *quaesit*. — XXIII, 35, 8 cogere tueri P, *cogeret ueri* R. — XXIII, 46, 12 cognomine Taurea P, *cognominet aurea* R. — XXIII, 15, 4 fortissimus quisque *pugnator esse desiderat* P. R has for the last three words *pugnatores sedesierat*; this gave trouble to the scribe who copied M, and in that manuscript *fortissimus* is made to agree with *pugnatores*. Thus M has *fortissimos quisque pugnatores sedesierat*. — XXV, 40, 12 degenerem Afrum P, *degenere mafrum* R. — XXV, 41, 1 arma prope're capere P, arma prope *recapere* R. — XXV, 41, 2 effusi equis P, *effusi se quis* R. — XXVI, 27, 14 se minime censere P, *semini me censere* R. — XXVI, 40, 3 Carthaginensium P, Carthagini *ensium* R. — XXVI, 51, 13 at ubi *adpropinquare tres* duces P, *adpropinquaret res* R. — XXVIII, 25, 9 in praesentia ut coepisset P, in praesenti aut coepisset R. — XXVIII, 33, 6 quam quantam edere leuia . . . P, quam quanta medere *lenia* R. — XXVIII, 33, 16 ad partem pugnae *capessendae* (*capessendam Luchs*) *steterat* P, *capessenda est et erat* R.

Frequently the scribe's uncertainty in the division of words is caused by the possibility that a given letter may be either the final letter of one word or the initial letter of the next, *e.g.* in the above list *cogeret ueri* for *cogere tueri*.

This is the case particularly with the letter *s*. It will be possible to give only a few examples in comparison with the large numbers to be found of this species of error. XXII, 43, 2 apud milites . . . *mirtos ex conluuionem* (= *conluuione*) P,

mixtos sex R. — XXIII, 15, 6 *eques etiam in hostes emissus* P, in *hoste semissus* R. Here the division is partly due to *in*, which the scribe supposed should take the ablative. — XXIII, 16, 12 *ne discrimen omne uirtutis ignauiaeque pereat* P, *uirtuti signauiaeque* R. — XXV, 12, 3 *praetori sullae* P, *praetoris ullae* R. — XXV, 15, 11 *in aciem copias educit* P, *copia se ducit* R. — XXV, 40, 2 *hostium quidem illa spolia* P, *illas polia* R. — XXV, 40, 5 *omnis belli artes edoctus* P, *arte se doctus* R. — XXVI, 27, 13 *uestigia sceleris* P, *uestigias celeris* R. — XXVI, 29, 2 *in consulum conspectu stantis* P, *conspectus tantis* R. — XXVI, 34, 13 *iamq. (= Q.) fului saenitiam* P, *iamque fuluiis aenitiam* R. — XXVI, 36, 11 *in publicis tabulis esse* P² (P¹ has *tabulis tabulis*), *in publici stabulis esse* R. — XXVI, 39, 13 *pedestres acies urgebant* P, *pedestres acie surgebant* R. — XXVIII, 5, 4 *mitti sibi* ab *domo praesidia* P, *mittis ibi* R.

False word-divisions are also very common in cases where a word ending with *a* is followed by a word beginning with *e*. The scribes were prone to regard the final *a* and the initial *e* as a diphthong, and to place the *ae* at the end of the first of the two words, thus changing a nominative into a genitive or dative case, or into a nominative plural, or adding the ending to words which did not admit of it. Examples of this class of error are :

XXII, 33, 9 *comitia edicturum* P, *comitiae dicturum* R. — XXII, 37, 9 *cui prouincia sicilia euenisset* P, *siciliae uenisset* R. — XXIII, 4, 5 *in qua edoctus (eductus Luchs) P, in quae doctus* R. — The mistake was aided by the fact that in P the line ended with *e*. — XXV, 40, 13 *pugnae fortuna euenisset* P, *pugnae fortunae uenisset* R. This was also the reading of M, but an ignorant corrector emended to *pugnae fortuna uenisset*. — XXV, 41, 13 *lentulo sardinia euenit* P; here *e* ends the line, causing the scribe of R to divide wrongly *lentulo sardiniae uenit*. — XXVI, 26, 6 *crimina edita ficta* P, *criminae dita ficta* R. — XXVI, 33, 9 *quorum culpa eminebat* P, *quorum culpae minebat* R, which is emended by a corrector in M to *quorum culpa minebat*. — XXVI, 44, 4 *submissa e castris* P, *submissae castris*

R. — XXVIII, 2, 5 qua equitatum P, quae quitatum R. — XXVIII, 2, 11 procella equestri P, procellae questri R. — XXVIII, 16, 3 grata ea patribus admonitio P, gratae a patribus admonitio R.

Naturally the tendency would be to place the diphthong at the end of the first word, inasmuch as there it forms an ending. Examples in which the *ae* is placed at the beginning of the second word are very few, *e.g.*: XXVIII, 1, 10 quia edictum imperatoris erat P, qui aedictum peratoris erat R. There *ae* is regarded as the equivalent of *e*.

Sometimes a final *ae* is broken up so that the *e* is attached to the following word, *e.g.*: XXII, 26, 1 ad spem liberalioris *fortunae iecit* (fecit *Luchs*) P, fortuna eiecit R. — XXVI, 34, 11 capuae iusserunt P, capua eius erunt R.

Errors of a somewhat similar nature arise from the phonetic equivalence of *ae* and *e* in the middle ages, *e* being written instead of the final diphthong. Examples are: XXIII, 49, 12 prouincia ut quae maxime P, prouinci aut quem axime R. — XXVIII, 10, 8 quae ratio transportandae P, queratio transportandae R. — XXVI, 36, 12 scribae referundo P, scribere ferundo R, an error which has been copied into M.

A fruitful cause of errors of all kinds¹ is the occurrence of proper names or other strange words with which the scribes were not familiar. Its influence is often felt in the division of words. *E.g.*: XXIII, 1, 12 a Claudio² praetore P, ac laudio praetore R. — XXIII, 17, 8 *omissa spe Nolae* potiundae P, omissas penolae R. — XXV, 40, 6 et Hannone Numidae P, et hanno nenumidae R. The scribe of M wrote first et hanno numide. — XXVI, 28, 1 Aetoli Acarnanes Loerique P, aetolia carnanes loerique R. — XXVI, 41, 11 . . . sensi. Trebia . . . P, sensit rebia R. — XXVI, 41, 13 uadenti Hasdrubali ad Alpis R, uadenti hasdrubalia dalpis R. — XXVIII,

¹ See chap. XI. on Emendation.

² For the reader's convenience I have inserted capitals in the proper names in giving the readings of P. There is, of course, no distinction in the manuscript itself.

12, 14 ab Romanis Ilienses P, ad romani silienses R. — XXVIII, 24, 12 *ad Cannas ignaviae* eorum P, ad canna signaviae R. An excellent example of the trouble which the scribes had with Latin proper names is the prophecy of Marcius, XXV, 12, 5. Here P has Amnem Troiugenam Ro|manae fugae (= Romane fuge) Cannam|ne te alienigenae cogant in campo Diome|dis conserere manus. This is written in R as follows: amnemtro iugenam romanae fugae cannam ne te alienigenae cogant in campodio me dis conserere manus.

In the foregoing examples the scribes have merely divided the letters in such a way as to form words not intended by the author. The error does not always stop here, however, and a second error is often a consequence of the first. The scribe, having begun with a wrong word-division, finds after he has written one or more words that he has a residuum of letters which do not make a word. He is compelled, therefore, by a conscious or unconscious alteration of the text to form a word out of what is left of the group of letters. This is usually done in some such simple way as the changing of a single letter or the addition of a letter necessary to the formation of a word. These additions or alterations are made for the most part quite unconsciously. The unbroken array of letters which are not grouped in any way is responsible for the illusion of the scribe. Enough letters are left to suggest a word to his mind, and he does not notice that he has mentally changed a letter or added one which was not there.¹ Sometimes individual habits of spelling and pronunciation are also factors in causing the additional error. In the lists of examples I shall also include a few cases in which the scribe has merely divided the words wrongly, and the alterations have been made consciously by the correctors or by the scribes on second reading.

(1) Examples of the change of a letter: XXVI, 40, 1 *consul*

¹ These errors which result from mental word-division are not confined to manuscripts of the ninth century and later. They are also frequent in the continuously written manuscripts of the fourth and fifth centuries. See Heraeus, *Quaestiones Criticae et Palaeographicae de Vetustissimis Codicibus Livianis*, § 1, 'Incrementa orationis ex verborum prava distinctione nata.'

iam magna parte anni circumacta P, *consilium magna per te* R. — XXVIII, 28, 6 *in sicilia messanam* P, *in siciliam esse nam* R. — XXII, 34, 10 *dictator esset* P, *dictatores sed* R. — XXVI, 40, 18 *hos neque relinquere laevinus in insula tum primum noua pace coalescente velut materiam nouandis rebus satis tutum* ratus est, (*Luchs*); *uelut materiam nouamdis reb. satis tutum* P, *uelut materiam nouam disrepsatis tutum* R. Here the scribe, thinking that *disreb. satis* formed a single word, consciously or unconsciously made the phonetic change of *b* to *p* before *s*. — XXVI, 48, 10 *quod amoti tantae dignitatis . . . fuerant* P, *quodam oti tantae* R; a corrector has changed the unintelligible *oti* into *uti*, which makes a Latin word but does not help the sense in any way. — XXV, 16, 14 *ibi paucis uerbis transigi rem posse* P; *transigirem posse* was first written by the scribe of R, who subsequently changed it to *transigerem posse*, and finally to *transigere posse*. — XXVI, 39, 18 . . . *mox praedae fuere thurinīs metapontinisque*. Ex *onerariis quae cum commeatu sequebantur*, *perpaucae in potestatem hostium uenere*, (*Luchs*); *mox praede fuere thurinīs metapontinisque*. Ex *honorariis quae cum meatu sequebantur . . .* P. The scribe of R wrote . . . *fuere hurinīs . . . cum meatu equabantur . . .*, and a corrector has changed *fuere* to *fuere*. The passage was copied by the scribe of M, as follows: *mox prede fuerit hurinīs . . . quae commeatus equabantur*.

(2) Examples of the addition of a letter: XXV, 11, 16 *planae et satis latae uiae patent in omnis partes* P, *patenti nominis partes* R. — XXVI, 30, 10 *orare se patres conscriptos, ut, si nequeant omnia, saltem quae comparent (compareant Luchs) cognoscique possint, restitui dominis iubeant* P, *sine* *que ante omnia* R, *e* being added to make a word of the letters *ant* which were left over through the erroneous division of *sine* and *que*. — XXVI, 34, 9 *censuerunt ne quis . . . haberet* P, *censuerunt inequis* R. — XXII, 19, 10 *in hanchoras (= anchoras) ueherentur* P. The scribe in R has wrongly divided the passage and made of it *in hanc hora se ueherentur*; a corrector, in order to make *hora* agree in case with *hanc*, has altered the passage

to read *in hanc horam se ueherentur*. — The insertion of more than one letter by a scribe is unusual, though not uncommon in the work of the correctors. An example of the insertion of a syllable on the part of a scribe is to be found in XXII, 21, 3. Here P has *mandonius indebilisque* (= Indibilesque); the scribe of R having wrongly written *mandonius inde* found that the remaining letters *bilisque* did not make sense, and added a syllable to make *nobilisque*. The passage now reads in R *mandonius inde nobilisque*.

Mistaken word-divisions are not by any means the only errors for which the lack of word-division in the *Puteanus* is responsible. A very large proportion of the examples of dittography and haplography, of the unconscious substitution of one word for another, of omissions of all kinds, of confusion of letters, and of other forms of corruption which appear in R, find their real starting-point in the bewilderment caused the scribe by the unbroken array of letters which confronted him in his original. It should therefore be kept in mind, in considering the errors given in Chapters IV to IX, that this is in the majority of cases a secondary, if not a primary cause.

IV. DITTOGRAPHY

Dittography, the inadvertent repetition of a word, a syllable, or a letter, is a species of *lapsus calami* too common in our own writing to need further definition. It is a form of error to which the mediaeval scribe was perhaps a little more prone than we are for the reason that his task of copying manuscripts was almost entirely mechanical. In the case of the scribes of R, who were copying a manuscript in which there was no division of words, the opportunities for errors of this nature were greatly increased. Their mistakes were often due as much to the erring of the eye as to that of the hand, and for that reason were more likely to lead to corruption.

(1) *Dittography of a Letter*. — The largest number of examples in R of the dittography of a letter are due directly or

indirectly to the confusion of the eye of the scribe caused by the continuously written text of the uncial manuscript. In glancing back to the page of his model after having written a word or syllable, inasmuch as there was nothing in the line to indicate the place where he had taken his eye from the page, the scribe sometimes unconsciously allowed the last letter of the word just written to arrange itself with the next group of letters. The letter was thus written twice, once at the end of one word, and again at the beginning of the next. Such doubling of letters is sometimes a cause, and sometimes a result, of wrong word-division.

Examples : XXIII, 3, 9 arce satis . . . tuta P, arces satis . . . tuta R. — XXIII, 8, 20 lacus thrasumennus et *cannae*, *tristia* . . . exempla P, canna et tristia R. — XXIII, 14, 7 serui supplicio P, seruilis supplitio R. — XXIII, 22, 15 quoniam eum P, quoniam meum R. — XXIII, 33, 3 iouis it (= id) templum est P, iouis sit templum est R. — XXVII, 43, 10 haec senatu scripta P, haec senatus scripta R. — XXVIII, 35, 5 animo speciem P, animos speciem R. — XXVIII, 24, 9 item *circum oram* maritimam P, circum moram R. — XXII, 19, 10 anchoralia (= ancoralia) P, ancora alia R. — XXIII, 44, 7 animaduertit P, anima aduertit R. — XXVIII, 3, 1 tradenda deditionemque P, tradenda adeditionemque R.

Sometimes the repetition of a letter is a mere accident of writing, the scribe unconsciously writing it a second time. These repetitions, which have nothing to do with the division of words and do not usually affect the sense of the passage, are comparatively unimportant and do not usually lead to corruptions. Examples are : XXVIII, 3, 14 defectione P, defec-tio|one R. — XXVIII, 36, 10 etruriam P, ettruriam R. — XXIII, 18, 12 manu emiserat P, manuemisserat R. — XXIII, 23, 2 comitia . . . *habita*. *creatus* . . . andranodorus P, habitacreatus R.

(2) *Dittography of Syllables and of Words*. — The repetition of syllables or words is not nearly so common as the repetition of a letter. Examples of the dittography of a word are com-

paratively few in R, and none would be likely to lead to further corruption unless the following: XXV, 41, 13 *pisoni iurisdietio urbana pupio sicilia . . . evenit* P. Here the scribe of R has written, *pisoni iurisdietio urbana pupio urbana sicilia . . . evenit*. XXIII, 38, 7 *aut uis aut fraus* timeri possit P, *aut ut uisa ut fraus* R. An interesting repetition of a syllable is seen in XXVIII, 3, 5 *frumentum sex mensum imperatum sagaque et togae exercitui* P, *frumentum sex mensum imperatum sagatumque et togae exercitui* R.

[To be continued.]

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GREEK INSCRIPTIONS FROM CORINTH

THE inscriptions presented in the following list represent the finds of Greek inscriptions from the excavations at Corinth from the beginning of the excavations there by the American School of Classical Studies in 1896, until the close of the campaign of 1901.

A fragment of an inscription in the old Corinthian alphabet, which was found in 1898, will be treated independently by Mr. S. O. Dickerman. The inscriptions, dating from Byzantine times and engraved on a marble pavement which was uncovered in 1901 (cf. *Am. J. Arch.* Suppl. to Vol. V, 1901, pp. 28 f.), have also been omitted. These last, together with the designs and devices accompanying them, should be treated as a unit in a separate paper.

The arrangement of the inscriptions in the present paper is in their chronological order, so far as that can be determined. In the case of some small fragments collected prior to 1900, the exact locality where they were found and also the year of their discovery are unknown; where these particulars are not given, ignorance of them may be taken for granted.

The paucity, fragmentary character, and, for the most part, late date of the inscriptions found at Corinth still continue to be a source of surprise and disappointment. A total of some sixty Greek inscriptions, together with a much smaller number of Latin ones, as the result of six yearly excavating campaigns on such a site as Corinth, is not a rich reward, and, moreover, few of the following are of importance as regards the history or topography of the city. Concerning some of the fragments, comment or interpretation is unnecessary or impossible.

The fact that all the inscriptions, excepting possibly the first nine, date from the rebuilding of the city by Julius Caesar in 46 B.C., shows how complete was the destruction of the older town by Mummius one hundred years before. As a number of terra-cotta architectural fragments and other remains belonging to the ancient city have been unearthed in the lower levels of the excavations, it cannot be said that we have not dug deep enough for the older Greek inscriptions. The scattered marble fragments lying about after the destruction of the city would be the first food for the lime-kiln which was to furnish the building material for the new town, and, of these fragments, broken inscriptions are by far the most convenient to handle and transport. Undoubtedly the greater part of the stone documents of ancient Corinth are lost forever, and will never be unearthed.

It is also a great disappointment at times to find a large block on which an old inscription has been chiselled out, leaving the surface either bare, with but scant traces of letters here and there, or filled with another inscription of the later period, and, in our opinion, of less importance.

The topography of the region about the "straight road" to Lechaëum, however, is now quite familiar. This must have been a busy thoroughfare in Roman times, and here, in the flanking colonnades, it was the fashion to dedicate statues to friends, relatives, and benefactors, as the discovery of bases in that region seems to indicate.

It is hoped that the finds of future years will yield inscriptions of more historical value and in a better state of preservation than those of the past. But where a city has been continuously inhabited from the earliest times to the present day, as is the case at Corinth, inscriptions are among the things least likely to survive, so that the hope may be vain.

1. A fragment of a small vase, found in 1901, along with many other pieces in a cutting a few paces east of the staircase which leads up to the east end of the terrace on which stood

the temple of Apollo, *i.e.* the Old Temple. None of the other fragments, however, belonged to the same vase as this one.



The piece is 0.034 m. in height by 0.03 m. in width. The material is a fine, light-yellow clay; the color used in the decoration is a chocolate brown. The inscription is in the Old Corinthian, epichoric alphabet, and is painted retrograde. The letters are about 0.005 m. in height and form the word *παρρυς*.

Not enough of the scene is left, from which the whole might be reconstructed, and so we cannot determine who this *παρρυς* is.

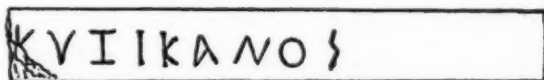
The fragment shows a helmeted warrior who seems to be lying on his back. His circular shield, which he holds up beside him, is emblazoned with an eagle volant, while his spear projects into the field above the rim of the shield and divides the inscription. At the right, we see the naked thigh and the bent arm of another warrior who is striding to the right; he holds a spear in the uplifted hand. The shaft of this spear follows the line of the break at the upper right side of the fragment, and so passes up through the pattern which bounds the field. Another spear is seen at the left, crossing that of the fallen warrior; this is probably held in the hand of a third warrior coming from that direction. It may be supposed that the whole scene represented the struggle over the dead body of a hero who had fallen in battle.

2. A handle of a vase with black glaze, found in 1901 near the triglyphon which borders the "Old Fountain" on the south (cf. *Am. J. Arch.* Vol. VI, 1902, p. 318), at a depth of 1.50 m. below the top of the triglyphon. The handle is 0.035 m. in length and 0.018 m. in width; the letters are about 0.01 m. in height, and are



scratched through the black glaze. The dedication is to Eucles — Εὐκλέ. The fragment probably dates from the early part of the fifth century B.C.

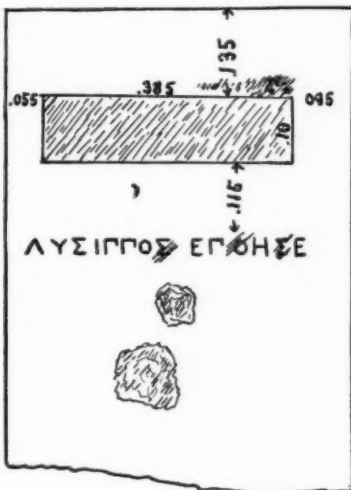
3. A block of white marble, found in 1899, at the eastern side of the fountain of Pirene (cf. *Am. J. Arch.* 1899, p. 685). The block is 0.92 m. in length, 0.44 m. in width, and 0.11 m.



thick. The inscribed face (at the end of the block) is 0.81 m. in length; the letters are 0.05 m. in height.

The inscribed surface describes a gentle curve, and this, together with two square holes in the upper surface, tends toward the conclusion that the stone formed part of a base, erected, as the inscription shows, by a native of Cyzicus. The Doric form Κυζικανός is used. The forms of the letters would place the inscription in the first half of the fifth century B.C.

4. A block of soft sandstone, found in 1901, immediately in front of the west wall of the vaulted chamber which lies south of the temple of Apollo. The stone was not far from the present surface of the earth, i.e. it was on a level with the top stone of the wall which closes this vaulted chamber in front, and was 5.50 m. distant from it toward the south. It could not have been near its original position. Height, 0.73 m.; width,

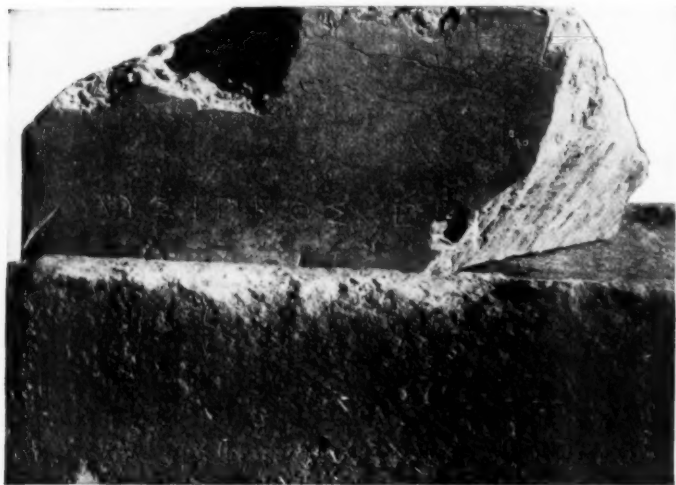


Λύσιππος ἐποίησε.

0.53 m.; thickness, 0.355 m. Letters, 0.02 m. to 0.025 m. in height.

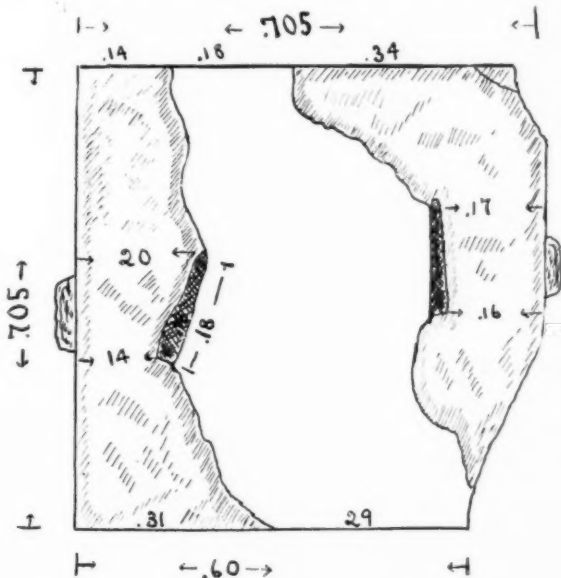
Above the inscription is a cutting in the stone, 0.385 m. in length, 0.10 m. in width, and 0.05 m. in depth. Its purpose is not clear, although the block probably formed a base for a statue. The surface of the stone is badly battered and the letters are indistinct: the stone itself is broken away at the bottom. The inscription is probably contemporary with Lysippus (c. 325 B.C.).

5. A base of dark-blue marble, found in 1901, on top of the south front of the triglyphon bounding the "Old Fountain" (cf. *Am. J. Arch. Suppl.* to Vol. V, 1901, p. 28; *ibid.* Vol. VI, 1902, p. 316). Although found bottom side upward and so not in its original position, yet it fits a cutting near by and probably formed one of a series of bases for statues, which



were placed in the beddings cut on top of this triglyphon. The stone is 0.30 m. in thickness, and its upper surface was 0.705 m. square. This upper surface is battered at each

side and the face bearing the inscription is broken away, so that the last letters have disappeared. The accompanying photograph and diagram give the details of these two sur-

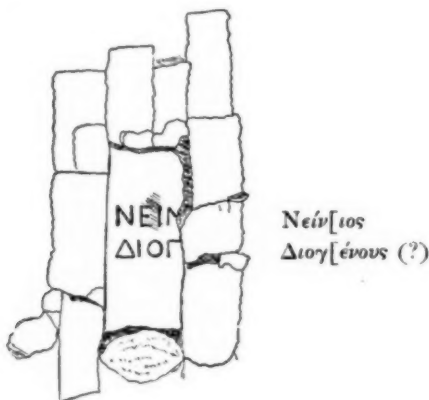


faces. The two bosses, used in handling the block, remain at the sides. The inscription was the same as the preceding, $\Delta \nu \sigma \iota \pi \pi \omega \varsigma \epsilon \pi [\acute{o} \eta \sigma \epsilon$, and is probably contemporaneous with it, although the upper and lower strokes of the Σ in this inscription are not parallel, and the Υ is made with the upper strokes curved, while in the preceding the corresponding strokes of the Σ are parallel and the Υ is made with straight lines. The letters are from 0.02 m. to 0.025 m. in height and are only 0.06 m. from the bottom of the block.

In the upper surface are still to be seen the reduced forms of the feet of the statue and the leaded fastenings which supported them. Judged from the mode of fastening, the statue was certainly of bronze, and as the actual size of the feet would

be somewhat larger than the slots under them, which are 0.18 m. in length, the figure was about life size. The right foot was but slightly in advance of the left, and was turned somewhat more outwards. Since no other marks for fastenings appear, as would be the case with a draped female figure, it is safe to conclude that this statue by Lysippus was male, possibly nude.

6. A block of white marble, built into the outer wall of the house of Pantelés Pantazés at Old Corinth. It is broken on all sides. Height, 0.39 m.; width, 0.12 m.; letters, 0.03 m. in height.



For the name *Νείνιος*, cf. *C.I.G.* 3662.

The stone was probably a grave stelé, dating from the fourth century B.C.

7. A block of soft sandstone, found in a grave near Old Corinth by a peasant. Height, 0.34 m.; width, 0.23 m.; thickness, 0.12 m. Letters, 0.025 m. in height. The inscribed face is covered with a light stucco, as are also the top and right side.

The feminine name, *Μενακίς*, is not otherwise known, but there seems to be no alternative; the masculine forms *Μενάλας*, *Μενάληης*, and *Μεναλκίδας* are common. The second name

is also a feminine form, and, instead of being the name of the parent, it may refer to Phliasia, the district about the city of Phlius, which was some miles southwest from Corinth.



Μ]εναλκίδος
Φ]λειασίας.

8. A block of soft sandstone, uncovered in 1900. It is built into a basis or wall, which lies a short distance south of the



rubble wall at the west end of the Propylaea. Height, 0.48 m.; width, *c.* 0.72 m.; the thickness is uncertain, 0.42 m. appears. The stone is part of an architrave block of the Ionic or Corin-

thian order, and shows the three bands cut in different planes. The letters are 0.05 m. in height, and are cut on the two upper bands. The fragment is probably of the Corinthian order, inasmuch as a Corinthian pilaster capital of the same material is built into the foundation next to it. The bands are preserved for a distance of 0.38 m. only, and the few letters are so worn as to be indecipherable.

9. A small fragment of white marble, found in 1900, at a considerable depth, among the foundation walls in the north-west corner of the Agora. The stone is broken on all sides except at the left, which is preserved intact to a height of only



0.065 m. The fragment is clearly a part of a slab which was 0.06 m. thick; the length of the lines is uncertain, the greatest width of the stone preserved being but 0.09 m. The remains of only four lines appear, with the bare suggestion of a fifth which came immediately after the lower break. The letters are 0.011 m. in height, and are clearly cut; with sharp, flaring apices terminating the straight strokes. The oblique stroke of the κ does not reach the lower line, as is also the case with the second vertical stroke of the Γ . The horizontal strokes of the Σ are parallel. From these considerations we may safely assume that the inscription belongs to the second century B.C., and coming before the destruction of Corinth, would be placed in the first half of the century.

Beginning with the second line, we see the letters ΙΓΓ, and the first stroke of another letter which can be only an Α; hence we are dealing with a hipparch. The only mention that we find of a hipparch at this time in the Achaean League, whose chief city was Corinth, is in Polybius, XXVIII, 6, where the historian gives an account of the deliberations of a council of chosen men of the League to choose sides in the war between Perseus and the Romans in 169 B.C. The course of moderation or a leaning toward Rome was thought best by all, although two of the members of the council, Apollonides of Sicyon, and Stratius of Tritaea, were hostile to Rome. The other four members were Arcesilaus and Ariston of Megalopolis, Xenon of Patrae, and Polyaeus. It is then probable that we are dealing with the hipparchy of Polybius, for he was chosen hipparch of the Achaean league at this time, and Archon was made general. Basing my conjectures on Polybius's account, I infer that the inscription ran as follows:

[Ἔδοξεν τῇ τῶν Ἀχαιῶν βουλῇ, τὸν Ἀρχωνα]
 [πρὸς τὴν στρατηγίαν εὐθέως προπορεύεσθαι]
 κα[ὶ τὸν Πολύβιον τὸν Μεγαλοπολίτην πρὸς τὴν
 ἱππ[αρχίαν καὶ . . . τὸν δεῖνα φυλάρχοντα τῆς δευτέ-]
 ρας φυ[λῆς ταύτης τῆς γνώμης μετεσχόντων]
 τοῦ Ἀρί[στωνος καὶ τοῦ Ἀρκεσιλάου Μεγαλοπολίτων, τοῦ
 Ξένωνος Πατρέα καὶ τοῦ Πολυαίνου

The inscription was probably broken into small fragments and scattered, when Corinth was sacked by the Romans in 146 B.C.

10. Stamped handles of amphoras; the first four found in 1901 west of the "Old Fountain," and the others found in 1900 in the northwestern corner of the Agora. The last two are of yellow Rhodian clay; the others are of the red Cnidian variety.

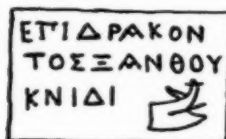
a. A circle 0.03 m. in diameter; in the centre a rose, and around the border the inscription. The letters are 0.0035 m. in height. Another stamp of this kind was found in 1900, and the name is also known from other localities (cf. *Athen. Mitth.* vol.



Ἀριστοκλεῦς.

XXI [1896], pp. 143 f., Pridik, 'Amphoren-Stempel aus Athen,' where the subject of these amphora handles is well treated).

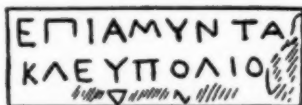
b. An oblong stamp: length, 0.033 m.; width, 0.02 m. Letters, 0.0025 m. in height. The symbol is the beak of a trireme.



Ἐπὶ Δράκον-
τος Ξάνθου.
Κνίδι(ον).

Both names are found on amphora handles, but not in this combination (cf. *Athen. Mitth.* vol. XXI [1896], pp. 127 ff., nos. II, 99, 100, 101, 154, and 168, 171).

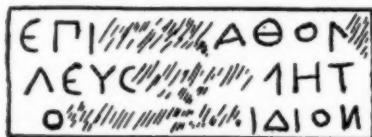
c. An oblong stamp: length, 0.045 m.; width, 0.015 m. Letters, 0.004 m. in height.



Ἐπὶ Ἀμύντα
Κλευπόλιο(ς)
Κνίδι]δ[ιον].

(Cf. *Athen. Mitth.* vol. XXI [1896], pp. 127 ff., nos. II, 13, and II, 192, 193, 219.)

d. An oblong stamp, badly worn: length, 0.055 m.; width, 0.02 m. Letters, 0.005 m. in height.



Ἐπὶ [Ἀγ]αθοκ-
λεῦς [Ἀδ]μήτ-
ο[υ(?) Κν]ιδιον.

(Cf. *Athen. Mitth.* vol. XXI [1896], pp. 127 ff., nos. I, 1; II, 2, 3.)

e. An oblong stamp: length, 0.045 m.; width, 0.018 m. Letters, 0.004 m. in height. The symbol is a dagger or short sword.



'E[πὶ ...
Αἰνέα
Κνίδιον.

(Cf. Dumont, *Insc. Ceram. Grec.* p. 145, no. 16; p. 162, no. 124, and p. 186, nos. 270-271.)

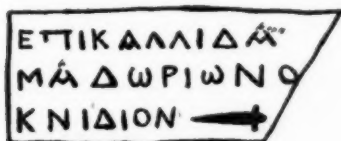
f. An oblong stamp: length, 0.055 m.; width, 0.017 m. Letters, 0.004 m. in height. The symbol is a cross.



'E[πὶ ...
Διονυσίου
Κ[ν]ίδιον.

(Cf. *Athen. Mitth. l.c.* p. 147, no. 68.)

g. An oblong stamp, broken at the right end: length preserved, 0.036 m.; width, 0.019 m. Letters, 0.003 m. in height. The symbol is a dagger.



'Eπὶ Καλλιδά-
μα Δωρίωνο[ς]
Κνίδιον.

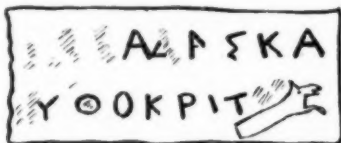
(Cf. *Athen. Mitth. l.c.* p. 161, nos. 168-169.) Δωρίων is, I believe, unique for these inscriptions.

h. An oblong stamp, broken at the left end: length, 0.043 m.; width, 0.011 m. Letters, 0.004 m. in height. The stamp is very badly worn.



..]ος Ἀρα[ξιν . . .
Κνί[δον].

i. An oblong stamp, broken at the left end: length, 0.05 m.; width, 0.02 m. Letters, 0.004 m. in height. The symbol seems to be the fore part of a dog.



...]σκα . .
Π]υθόκριτ[ος.

(Cf. *Athen. Mitth. l.c.* p. 171, nos. 242-243.)

j. An oblong stamp: length, 0.047 m.; width, 0.016 m. Letters, 0.005 m. in height.



Ἐ[πι Ἀν]α-
ξάνδρου
Πανάμ]ου.

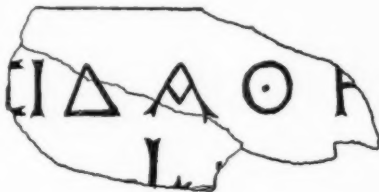
(Cf. *Athen. Mitth. l.c.* p. 130, no. 6.)

k. A circular stamp, 0.024 m. in diameter; in the centre a rose, and around the border the inscription:



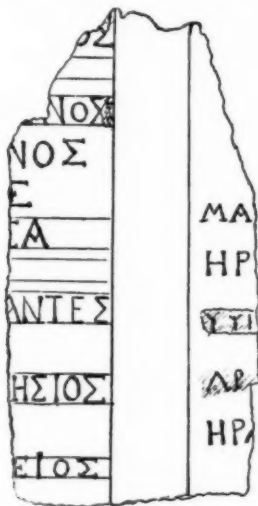
.... Καλλι]κράτευς.

11. Two fragments of blue limestone, found in 1900: total length, 0.165 m.; width, 0.08 m.; thickness (very irregular), 0.11 m. Letters, 0.025 m. in height. The stone is broken on all sides. The letters are in straight strokes of the lapices.



12. A fragment of white marble, found in 1900, near one of the Doric columns, which are *in situ* on a stylobate toward the

southeast foot of the terrace of the Old Temple: height, 0.38 m.; width of left face, 0.07 m.; width of right face, 0.045 m. The fragment apparently belonged to a block with three inscribed faces, the angles of which are also faced to a width of 0.057 m. The letters on the left face are 0.02 m. in height; those on the right face are but 0.015 m. The letters on the left face show the ends of names arranged in a column; they are cut within carefully ruled lines. The letters on the right face show the beginnings of names in a corresponding series; the third and fourth names have been erased with a chisel.



but some of the strokes still appear. The third name may have been $\mathbf{T}\psi\epsilon[\kappa\lambda\eta\varsigma]$; not enough remains of the others to conjecture their whole form.

13. A fragment of white marble, found in 1901, in the first ruined chamber to the west of the vaulted chamber before mentioned: height, 0.24 m.; width, 0.27 m.; thickness, 0.055 m.

Letters, 0.04 m. in height. It is broken on all sides, excepting the left, where appears the end of an egg and dart ornament, and also a scale pattern adjoining.



π]ανι
 εὐθηνί[ας ἐπιμελητῆς καὶ
 δημός[ιος
 .. τ]ρι

It probably formed part of an honorary tablet giving the titles of some official.

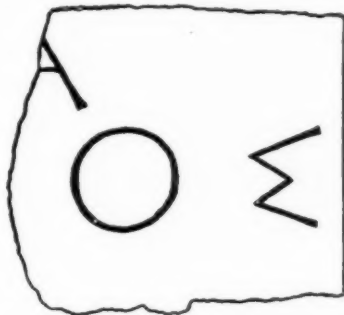
14. A block of hard blue limestone, found in 1901, on the level of the Byzantine pavement in front of the vaulted chamber before mentioned: total height, 0.245 m.; width, 0.25 m.; thickness, 0.11 m. The original smooth surface is preserved on the face, top, bottom, and left side; the bottom is cut backward in a curve, both in front and at the side. The back was left rough. The stone was probably built into a wall as a sort of bracket, but as it is broken away at the right, we cannot determine its extent. The inscribed face is 0.185 m. in height; the letters are about 0.02 m. in height. Only the beginnings of the four lines of the inscription are preserved:



Τίτο[ν
 ἀρίσται[ς
 ἀρετᾶς ἐν[εκα προξενίαν καὶ
 πολιτείαν(?)
 εἰς τε αὐ[τὸν καὶ ἐκγόνους.

The decree dates from Roman times, and grants honors to a certain Titus.

15. A fragment of blue limestone, found in 1901: height, 0.135 m.; width, 0.15 m.; thickness, 0.23 m. Letters, 0.045 m.



in height. The stone is broken on all sides but the right. Remains of two lines appear, the second of which shows the ending of a name in *-ος*.

16. A fragment of white marble, broken on all sides: height, 0.12 m.; width, 0.06 m.; thickness, from 0.045 m. to 0.055 m.



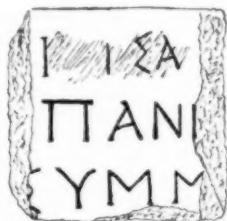
.. γρ]αμμα[τεὺς (?)
.... θι

The inscription is cut on a transverse band, and part of an ornamental band appears above this. Letters, 0.015 m. in height.



17. A large block of white marble, badly broken and worn: height, 0.72 m.; width, 0.48 m.; thickness, 0.17 m. Letters, 0.04 m. in height. The block was taken from the main excavating area and placed with many others near the Museum; the presence of letters was not noticed until afterwards. The inscribed surface is worn smooth, as if the stone had, at some time, been placed face upwards in a pavement. Only the ends of four lines remain.

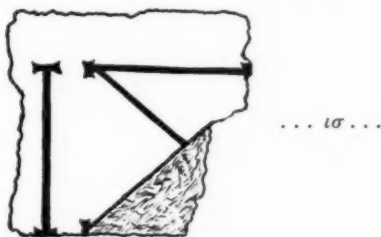
18. A fragment of friable, crystalline stone, found in 1901, in one of the buildings to the west of the road to Lechaeum:



... σα
 .. παν[ι
 . σύμμ[αχος (?) ...

height, 0.18 m.; width, 0.19 m.; thickness, 0.08 m. Letters, 0.035 m. in height. The stone is broken on all sides excepting the top.

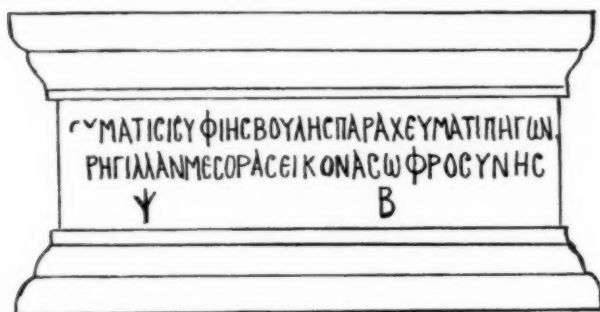
19. A fragment of blue limestone, found in 1901, near the vaulted chamber before mentioned: height, 0.10 m.; width, 0.105 m.; thickness, 0.039 m. Letters, 0.075 m. in height. The fragment is broken on all sides.



20. An irregular fragment of white marble, found in 1900, on the dumping ground: height, 0.265 m.; width, 0.12 m. Letters, 0.055 m. in height. The remains of four lines appear. Two peculiar marks of abbreviation are seen in the second line; one is over the first letter, M, and the other separates the M from the following A. It is possible that the mark over the M is an H, and indicates the abbreviation of the participial ending, — μένη.



21. A statue base of white marble, found in 1899, lying in front of the east apse of the court of the fountain of Pirene. The base measures 0.345 m. in height, 0.67 m. in width, and is 0.665 m. deep. A moulding at the top and bottom runs around all sides. The right side has a relief representing a garland with musical instruments. The inscribed face of the stone measures 0.63 m. \times 0.18 m., and the letters are 0.03 m. in height. The forms of E, C, and W on this inscription are found on three other inscriptions dealing with Regilla, viz. *C.I.A.* III, 1333 a, *C.I.G.* 6184, and *C.I.G.* 6280, whereas *C.I.A.* III, 1417, an inscription from Eleusis (cf. 'Εφ. 'Αρχ. 1885, p. 152) and an inscription from Olympia (cf. *Arch. Zeit.* 1878, p. 94, no. 149), which date from the same period, have E, Σ, and Ω, so that the style of writing seems to have varied during the same years. At the end of the first line WN are joined together, and this is also the case with HN in No. 23.



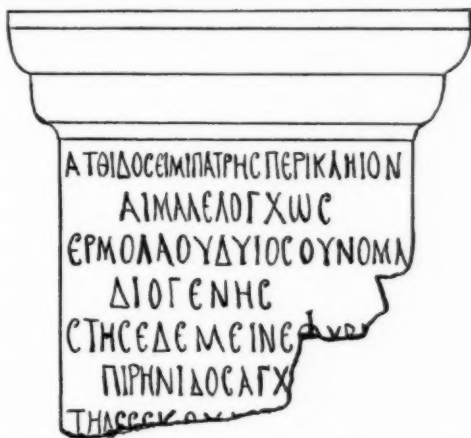
N]εύματι Σισυφείης βουλῆς παρὰ χεύματι πηγῶν,
 'Ρηγίλλαν μ' ἐσορᾶς εἰκόνα σωφροσύνης.
 Ψ(ηφίσματι) Β(ουλῆς).

Herodes Atticus married Appia Annia Regilla about 143 A.D., and she died about 161 A.D. Herodes died about 177-180 A.D., and this statue was probably erected in the interim between the deaths of wife and husband, or about 162 B.C. It was fitting that the Corinthian Senate should honor Regilla, for Herodes had been a benefactor of the city in building a roofed theatre (cf. Philostratus, *Vit. Soph.* II, 1, 5), had embellished the Isthmian sanctuary (cf. Paus. II, 1, 7), and had also built an Odeum (cf. Paus. II, 3, 6), which may be the same structure as that mentioned by Philostratus. Gurlitt (*Ueber Paus.* p. 58; Frazer's *Paus.* Introd. pp. xvi and xvii) would place Pausanias's account of Corinth later than 165 A.D., but it may be an argument for an earlier date for his second book that Pausanias makes no mention of this statue of Regilla, which was undoubtedly erected before 165 A.D. and would be a fit subject for remark. After her death Regilla was also honored by the Odeum at Athens (cf. Philostr. *ib.*), by the Triopeium on the Appian Way near Rome (*C.I.G.* 26), and by a statue set up in Eleusis (cf. 'Εφ. 'Αρχ. 1885, p. 152).

The poetical use of Σισύφιος as applied to things Corinthian is matched by examples in *Anthol.* VII, 745, and IX, 151, Paus. V, 2, 5, and Theoc. *Id.* XXII, 158.

The εἰκόνα σωφροσύνης of this epigram is a parallel to τὸ φῶς τῆς οἰκίας of the bilingual inscription (*C.I.G.* 6184), and the χεῦμα πηγῶν—"the gush of the springs"—is the six-chambered fountain of Pirene, near which the base was found. (For the topographical value of this inscription, cf. R. B. Richardson's paper on Pirene, *Am. J. Arch.* vol. IV [1900], p. 235, where a photograph of the stone is given.)

22. A statue base of bluish marble, found in 1900, at the foot of the stairway leading to the Propylaea. The stone has a moulding at the top which extends across the front and around the two sides, the back being left rough because the statue was to be placed against a wall. The top measures 0.70 m. in width, and is 0.65 m. in depth; the greatest preserved height from the break is 0.95 m. The width of the inscribed face is 0.54 m. and the letters have an average height of 0.04 m., although their breadth and spacing is governed by the number of letters to be put in a line.



Ἀτθίδος εἰμὶ πάτρης Περικλήϊον | αἷμα λελογχώς,
Ἑρμολάου δ' υἱός, οὖνομα | Διογένης.
στῆσε δέ μ' εἰν Ἑφύρ[η] | Πιρηνίδος ἀγχ[οῦ πηγῆς]
τῇ[δε Σεκουνδείνος

It is tempting to suppose that the use of the adjective Περικλήιον, as applied to αἷμα, refers not to any direct descent from Pericles, but rather that a man who possessed such "blood" reflected the spirit of the Periclean age and belonged to a family of artists. A Greek sculptor named Diogenes, who was also from Athens, is the only person found in literature who comes under this head. Pliny (*Nat. Hist.* XXXVI, 38) says that a certain Diogenes of Athens made the sculptures for the Pantheon of Agrippa in Rome (c. 27 B.C.), and in the same paragraph mentions, among other artists, a certain Hermolaus. We may possibly identify the father and son of our inscription as the two artists mentioned by Pliny. A possible identification of a Diogenes, whose name is given on the plinth of a statue found at Nineveh, with the Attic artist has also been made (cf. A. S. Murray, in *J.H.S.* III, p. 240). The name Σεκουνδείνος, conjectured in the seventh line of our inscription as the name of the man who dedicated this statue "near to the Pirenian fount," seems plausible. The third letter of this line can be nothing but Δ or Λ, and the following one only Ε or C as regards form—coming after either Δ or Λ, this last must be the vowel. This, then, does away with the possibility of another Ε following, so the second of these three similar markings must be C and the next after that, coming as it does before a certain K, must be Ε again. After the K, parts of O and Y remain. It is seen that the first word must be τῇδε, and this leaves CEKOY, — from which it remains only to supply the Roman name Σεκουνδείνος to furnish a subject for στήσε and to complete the first part of the pentameter. This name is known to exist from two inscriptions, — *C.I.G.* 3714 and 6524 — and, being Roman, would connect Diogenes with Roman affairs, as is the case with the Diogenes of Pliny.

In line 6 we have the adjective "Pirenian," and from the provenience of the inscription, which was found not far from the spring of Pirene, we may easily conjecture πηγῆς from the πηγῶν of the preceding inscription. The word itself is just the proper length for the space at our disposal.

The statue was probably set up in a colonnade at the side of the road leading from the Propylaea to Lechaeum, and so was near "Pirene's fount," to which Pausanias turned off just after leaving the Propylaea.

23. A statue-base of bluish marble, found in 1900, at the foot of the stairway leading to the Propylaea. The block has a moulding at the top and bottom, extending across the front and around the two sides, while the back is hewn off as in no. 22. The stone is 1.34 m. in height, 0.73 m. wide at the base, and 0.70 m. deep. The inscribed face is 0.855 m. high, and 0.52 m. wide; but the six lines reach only 0.33 m. from the top of this face. The letters are 0.03 m. in height, and are very unevenly and carelessly cut, sometimes decreasing decidedly in size toward the ends of the lines in order to obtain space for the whole line of the verse, as may be seen at the end of line 5.

Ε]ἰς τύπον εἰμερόεντα Ἰθύνορος ἀνθυπάτιο
 ἥ]ρπασέ τις μορφὴν, τ[ῆ]δ' ἐνέγλυψε λίθῳ.
 Μορφὴν λαοτόμος μενέη μειμήσατο τέχνη.
 Ἐλλάδι κόσμον ὅλον μητρὶ χαρίζομενος.
 σ]τῆσε δ' ἀγασσάμενός μιν ἀμύμων Εὐτυχιανὸ[ς]
 ἀ]ντὶ κασιγνήτου εὖ διέπων Ἐφύρην.

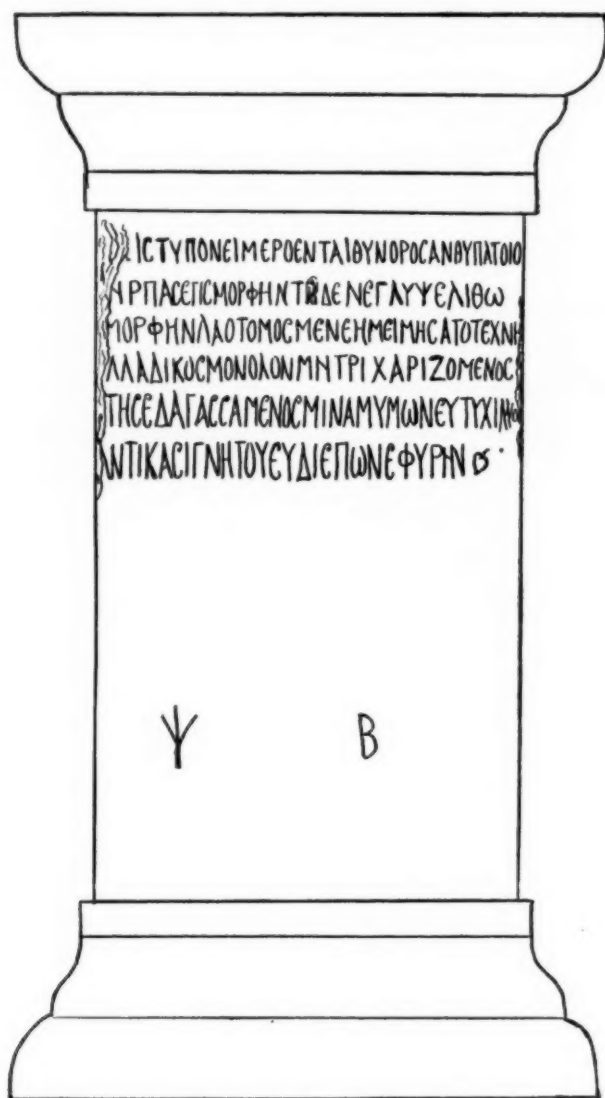
Ψ(ηφίσματι) Β(ουλῆς).

The name of Ithynor—from *ιθύνω*—is unique, but that of Eutyechianus is found in inscriptions. None of the cases found, however, can be identified with this Eutyechianus, who ruled Corinth as proconsul after the death of his brother. Probably these two men were proconsuls of Achaëa sometime after Vespasian's reign (70–79 A.D.), when Achaëa was again made a Roman province after having been given its independence by Nero.

In the form *μενέη* from an adjective *μένεος*, we have a *ᾗαξ λεγόμενον*. The form comes from *μένος*, as *τέλεος* from *τέλος*.

In line 3, we find *ει* written for *ι* in the aorist of *μιμέομαι*.

It seems not unlikely from the general style of the verse, the



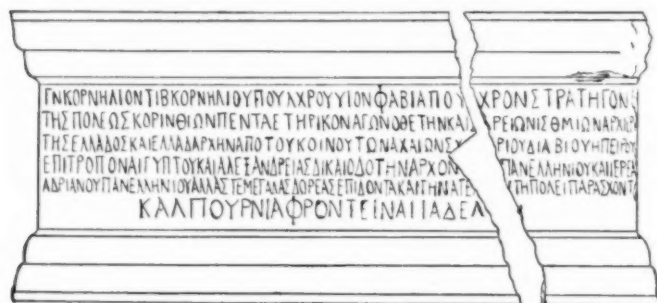
No. 23 (see p. 47).

use of the rare form $\sigma\tau\tilde{\eta}\sigma\epsilon$ in both inscriptions, together with the name 'Εφύρη , and the evident inclination of the verse-maker to emphasize artistic qualities in such expressions as "a pleasing type," "catching and cutting the form," "with forceful skill," and "giving graciously the whole embellishment to mother Greece," that this inscription and the one preceding were made by the same man.

The base was found near the preceding one, and was probably set up in the same colonnade.

24. A large marble base, found in two parts — the smaller in 1899, and the larger in 1900 — to the west of the line of shops bordering the roadway leading northward from the Propylaea. The stone is edged by a moulding above and below, and is 0.75 m. in width, 0.335 m. in height, and 1.32 m. in depth. The inscribed face is 0.165 m. broad, and was about 0.68 m. long, *i.e.* 0.49 m. (length of larger portion) + 0.19 m. (length of smaller). The letters of the first and last lines are 0.02 m. in height, while those of the other lines are but 0.017 m. The letters are accurately and beautifully cut, in contrast to the three preceding inscriptions. A, E, Ξ, and Ω are used. The cross stroke of the H in the last line was omitted by the stone-cutter. We have here the same Gn. Cornelius Pulcher, son of Tiberius Cornelius Pulcher, of the Fabian tribe, who is also honored by a similar inscription which was found in a ruined church at Damala, the old Troezen (cf. *C.I.G.* I, 1186). Boeckh says that the titles there given to Cornelius stand probably in the order of their acquirement. The only point of correspondence with our inscription is that he is $\alpha\gamma\omega\nu\theta\acute{\epsilon}\tau\eta\varsigma \text{Καισαρείων Ἴσθμίων}$ in both cases. In the Troezenian inscription are given the additional titles of $\chi\epsilon\iota\lambda\acute{\alpha}\rho\chi\omicron\varsigma$ (tribune) of the fourth Scythian legion, which served in Syria at the time of Dio in 219 A.D. (cf. Dio Cassius, *Hist. Rom.* 79, 7), $\alpha\upsilon\tau\iota\sigma\tau\rho\acute{\alpha}\tau\eta\gamma\omicron\varsigma$ of Corinth, instead of $\sigma\tau\rho\alpha\tau\eta\gamma\acute{\omicron\varsigma}$ as in our inscription, and $\epsilon\upsilon\theta\eta\nu\acute{\iota}\alpha\varsigma \epsilon\pi\iota\mu\epsilon\lambda\eta\tau\acute{\iota}\varsigma$. He is $\alpha\gamma\omega\nu\theta\acute{\epsilon}\tau\eta\varsigma$ of the games named after Nerva, Trajan, the Germans, and the Dacians, besides of those men-

tioned in our inscription, and he is also ἀγωνοθέτης of the Asclepieia at Epidaurus. Other additional titles are general and secretary of the Achaeans, and high priest and governor of Caesar. His friend, Gn. Cornelius Philiscus, set up the inscription to Cornelius Pulcher at Troezen, but in the present instance at Corinth, it was done by his sister, Calpurnia Frontina.



Γν. Κορνήλιον Τιβ. Κορνηλίου Πούλχρου υἱὸν Φαβία(ι) Πού[λ]-
χρον στρατηγὸν
τῆς πόλεως Κορινθίων, πενταετηρικὸν ἀγωνοθέτην Καί[σα]ρείων
Ἰσθμίων, ἀρχιερ[έα]
τῆς Ἑλλάδος καὶ Ἑλλαδάρχην ἀπὸ τοῦ κοινοῦ τῶν Ἀχαιῶν συ[νεδ]-
ρίου διὰ βίου Ἡπείρου,
ἐπίτροπον Αἰγύπτου καὶ Ἀλεξανδρείας, δικαιοδότην ἄρχον[τα τοῦ]
Πανελληνίου καὶ ἱερέα
Ἀδριανοῦ Πανελληνίου ἄλλας τε μεγάλας δωρεὰς ἐπιδόντα καὶ
τὴν ἀτέλ[ειαν] τῇ πόλει παρασχόντ[α].

Καλπουρνία Φροντεῖνα ἡ ἀδελ[φή].

I have not found the title of ἐπίτροπος of both Egypt and Alexandria occurring elsewhere. A body of *epitropoi* or procurators, together with a *διοικητες*, administered the domain lands of Egypt in Roman times. These state lands consisted of the properties which had belonged to the Ptolemies, the possessions of state debtors and properties for which no heirs or claimants appeared (cf. T. G. Milne, *A History of Egypt under*

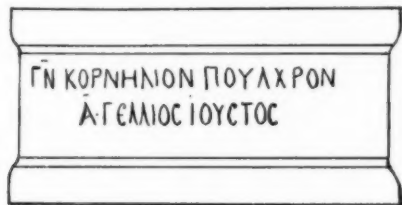
Roman Rule, p. 11 and references). Alexandria had a separate body of officers, and Cornelius Pulcher seems to have been specially attached to that city also. This was the office of the *epitropos* until the reforms of Diocletian toward the end of the third century A.D., when the *dioiketes* had his title changed to *epitropos* of the royal property.

The other titles found in this Corinthian inscription, with the exception of *Helladarch* over Epirus, are common in inscriptions of the period.

From the last line, Cornelius seems to have been a special benefactor of Corinth, and the Corinthian inscription, from its additional titles, is probably of later date than that from Troezen. It can be dated no farther back than the subjugation of the Dacians in 104 A.D., and is probably to be placed sometime after the end of Trajan's reign (116 A.D.).

It is curious to note that the customary Ψ Β ("by decree of the senate") is not found on the inscription; it occurs, however, on the Troezenian base. Another difference from the Troezenian inscription is that ΕΙ is used instead of Η in the endings of the names of the games.

25. A statue-base of white marble, found in 1899, on the east side of the Propylaea staircase. The base has a moulding at the top and bottom, and measures 0.60 m. in width, 0.30 m. in height, and 0.58 m. in depth. The inscribed face is 0.565 m. long by 0.16 m. wide. The letters are 0.03 m. in height.

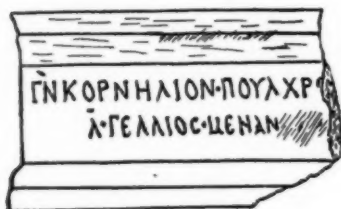


Γν. Κορνήλιον Πούλχρον.
Α· Γέλλιος Ίούστος.

This Cornelius Pulcher is undoubtedly the important personage of the preceding inscription.

In the drawing I have given the first letter of the second line as **A**, but on the stone the cross stroke is very faint, indeed but a mere scratch, and is probably accidental. The first letter may, therefore, be **Λ**, as in the following inscription. With the possibility of an **A**, the Aulus Gellius, here mentioned as the dedicator of the statue, may be the well known writer of the *Noctes Atticae*, in which case the statue was set up sometime before his death in 180 A.D. Of course, the point between the name and abbreviation would show conclusively that his name could not have been Agellius, as was once supposed.

26. A base of white marble, found in 1901, in a late wall built on the west buttress of the Propylaea, immediately to the right of the entrance. Height, 0.305 m.; width preserved, 0.54 m.; depth, 0.57 m. Length of inscribed face preserved, 0.47 m.; width, 0.145 m. Letters, 0.035 m. in height. The base is broken at the right side.



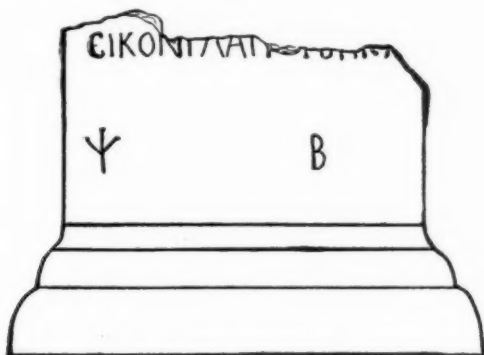
Γν. Κορνήλιον·Πούλχρ[ον]
Λ·Γέλλιος·Μέναν[δρος].

The same Gnaeus Cornelius Pulcher is here represented as in the preceding inscription, but here the dedicator is Lucius Gellius Menandrus and not Lucius (?) Gellius Justus.

These two corresponding statues probably stood on either side of the stairway which leads up to the Propylaea. The statues are probably to be found among the numerous headless and footless draped Roman statues recently exhumed near by.

27. A part of a statue-base of bluish marble, found in 1900, at the foot of the Propylaea stairs. The stone has a moulding around the face and two sides of the bottom, but is left rough and square at the back. It is 0.65 m. in height, and the base

measures 0.72 m. in width by 0.75 m. in depth. The inscribed face is 0.55 m. wide, and is preserved to a height of 0.30 m. The letters are 0.045 m. in height.



Εἰκόνι λα[ῖνον . . ο . κ .
Ψ(ηφίσματι) Β(ουλήs).

The base resembles nos. 22 and 23, and we have here the end of an elegiac stanza.

28. A small fragment of hard limestone, found in 1900, in the northwest corner of the Agora. Through the line of letters it



Γ. Ἰούλ[ιον . . .

measures 0.10 m.; the height is 0.10 m., and thickness 0.095 m. The letters are 0.045 m. in height. This small piece was evidently broken from the corner of a block.

29. A fragment of blue limestone, found in 1901, at the foot of the steps leading to the Propylaea. It is broken on all sides

but the left, which shows a smooth surface. Height, 0.095 m., width, 0.085 m.; thickness, 0.07 m. The letters, which formed the beginning of a word, are 0.045 m. in height.



30. A marble plaque, found in 1899, near the east end of the temple of Apollo. The stone is broken at the top and at the right side. Its height is 0.255 m., breadth, 0.24 m., and thickness, 0.04 m. The inscription was surrounded by a flat, raised border 0.04 m. broad, and from the appearance of the break at the back where the stone is bevelled, it probably contained but one column. The letters are 0.015 m. in height.



Λε]υκτρο[ν ἔτ(η) . .
 Κορώνη [ἔτ(η) . .
 Κεφαλληνία [ἔτ(η) . .
 Βοιαί ἔτ(η) [. .
 Κλίτωρ ἔτ(η) ζ'
 Μεσσήνη ἔτ(η) ζ'.

Leuctrum is probably the small place on the west coast of Laconia, now Lestro. It is mentioned by Xenophon, *Hell.* VI, 5, 24; Plut. *Pel.* 20; Paus. III, 21, 7 and 26, 4; Strabo, VIII, 360-361; Ptol. III, 16, 9; and Pliny, IV, 5 (8). Boiae is a place in Laconia mentioned by Strabo, VIII, 36, 4; Paus. I,

27, 5; III, 21, 7, and *Schol.* Aeschin. 2, 75. The other names are well known.

The general appearance of the letters, which are irregularly and poorly cut and late in form (cf. ξ, ω), as well as the denotation of the numbers, show that the inscription is some years after the best Roman period of the second century A.D., and so can have had nothing to do with the Achaean League, to which, curiously enough, all these towns formerly belonged. The inscription probably deals with certain privileges which were granted to the towns named for a certain number of years. The only numbers preserved show that Clitor had this privilege for six years and Messene for ninety.

31. A large cylindrical block of white marble, found in 1900, in the northwest corner of the Agora. The block was used as a statue-base, and the upper and lower edges are worked into a slightly raised margin. The stone is 1.35 m. in diameter, and 0.88 m. thick. The space occupied by the two lines is but 0.30 m. broad, and the letters are 0.06 m. in height, in the style of the late Roman period (cf. Ε, Λ, C, ω).



Δία (?)] Ὅμβριον Ἡλιοδωρος
εὖς] ἐβίης ἔνεκα.

The block was originally inverted, and had an inscription in older characters, which have been chiselled out, leaving but scant traces.

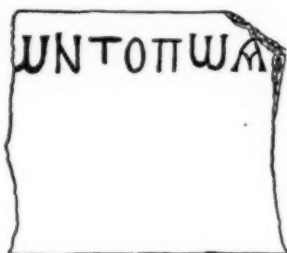
32. A fragment of a relief of white marble, found in 1898, in the valley near the steps leading to the Propylaea. Total height, 0.295 m.; width across the inscribed face, 0.31 m.; thickness, 0.10 m. The relief is mutilated on all sides except the lower. The inscribed band is 0.105 m. in width, and the letters are 0.025 m. in height.



Εὐκαρ[π]ῶ Ἐπ ...

The relief represents a draped figure walking from the left toward a table, which appears to be draped with a cloth. The feminine name Εὐκαρπῶ is not known, but the masculine form Εὐκαρπος is common in inscriptions.

33. A fragment of bluish white marble of poor quality. Height, 0.175 m.; width, 0.20 m.; thickness, 0.14 m. The



... ὦν τόπω(ι) ἅ ...

stone is broken at each end, but the upper and lower sides are worked into mouldings which meet at the back in a surface 0.07 m. in width. The letters are 0.025 m. in height.

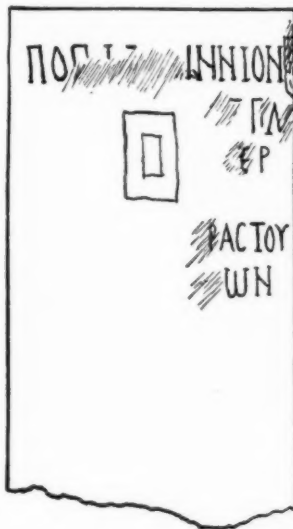
34. A fragment of bluish marble, found in 1901, a short distance south of the vaulted chamber before mentioned [cf. no. 4].



... ων ...
.. κ]αὶ γὰρ ...

Height, 0.12 m.; width, 0.20 m.; thickness, 0.17 m. Letters, 0.07 m. in height. The stone is irregularly broken on all sides, and the remains of but two lines of the inscription are seen.

35. A block of hard bluish marble, found in 1901, near the foot of the steps leading to the Propylaea, between the line of the colonnade and the shops at the west of the road, and some little distance north of the basis which is built in the side-walk. Height, 0.77 m.; width, 0.435 m.; thickness, 0.335 m. Letters, 0.055 m. in height. The lower end of the stone is battered, but in the top is a dowel hole, with a channel cut to the edge of the stone; evidently this block originally formed part of a pilaster. It is rough at the back, but the face and sides are smooth. The inscription has been nearly obliterated and only a few letters remain visible. Some rectangles have been scratched on the

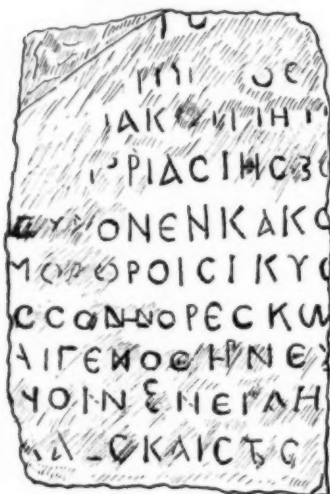


inscribed surface at a later date, to be used in playing games; the block was probably used as a paving stone at that time.

We can fill out the first line as Ποπ[ίλιον Ν]ώνιον. Popilius is a common Roman name, and the Ninnian gens also is known; cf. Dio Cass. XXXVIII, 14; XXXIX, 35, and *C.I.G.* 6616 b.

In the fourth line which appears we may conjecture Σεβ[α]στού.

36. A slab of coarse, crystalline white marble, found in 1899, near the fountain of Pirene. Height, 0.41 m.; width, 0.245 m.; thickness, 0.145 m. The stone is broken at the top and on each side. The letters are from 0.012 m. to 0.025 m. in height. The surface of the block is so worn that the letters are almost illegible, and there is but a small space where they can be read with certainty.

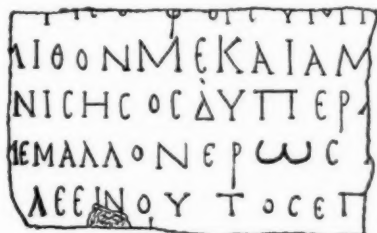


..... ΙΟ ...
 ΠΥ (?) . ΘΕ ...
 ... Α ΚΟΙΜΗ [ΤΗΡΙΟΝ (?)
 ... -ΡΙΑΣΙΗΣ Β[Ο] ...
 Δ ΑΙ] ΣΧΡΟΝ ΕΝ ΚΑΚΟ[ΙΣ] ...
 ... -ΜΟ[Ι] ΘΡΟΙ ΣΙΚΥ[ΩΝΟΣ] ...
 ... ΣΣΟΝ . ΘΡΕΣΚΩ[] ...
 Κ ΑΙ ΓΕΝΟΣ ΗΝ Σ ...
 ... -ΝΟΗΝ ΕΝΕΙΛΗ[ΣΕ] (?) ...
 10 ... Α . Σ ΚΑΙ ΣΤΕ- ...

It seems safe to supply Σικυ[ώνος] in line 6, but not enough of the inscription can be read to judge of its intent.

37. A slab of bluish marble, found in 1901, in the third shop on the west of the road to Lechaeum. The stone is broken on

all sides. Height, 0.27 m.; width, 0.43 m.; thickness, 0.038 m. Letters, *c.* 0.035 m.; O = 0.025 m.; P = 0.055 m. The letters are clearly cut and show traces of red paint.



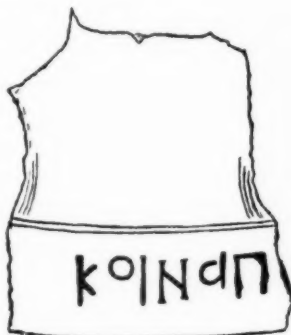
..... οι σύμ[μαχοι (?)
 ... λίθον με καὶ ἀμ-
 ... -νίσσης, ὃς δ' ὑπερ
 ... με μάλλον ἔρωσ
 5 ... ἐ]λεείν οὗτος ἐπ-

The intent of the inscription is not evident; it may, however, be part of a grave stelé. A mark to indicate the elision of *ε* is clearly cut immediately over the *Δ* of line 3.

38. A fragment of bluish marble, broken on all sides, excepting the lower: height, 0.235 m.; width (at bottom), 0.20 m.; thickness, 0.26 m. The inscribed band is 0.08 m. in width, and the letters are 0.035 m. in height.

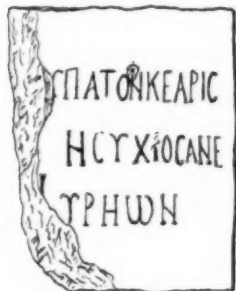
The letters are carelessly cut. The inscription began with the *Κ*, for this letter is 0.055 m. from the break at the left. The second word may have been *πολιτῶν* or *πολεμίων*. *Κοίν'* ἀπ[ὸ τῶν πολε-

μίων is a possibility. The fragment formed part of a column or round base, and may have represented an offering of common spoils from the enemy.



Κοινὰ π.

39. A fragment of white marble, found in 1901, south of the vaulted chamber before mentioned [cf. no. 4]; it was but a short distance under the surface of the ground. Height, 0.30 m.; width, 0.27 m.; thickness, 0.08 m. Letters, 0.04 m. in height. Only the right edge of the block is preserved intact.



... ὑπατον κέ(=καὶ) ἄρισ-
τον] Ἡσύχ[ι]ος ἀνέ-
θηκε . . . κ]υρήων (?).

This seems to be an honorary tablet set up by a certain Hesi-chius to some "most high and excellent" personage whose name is lost. It is possible that we are dealing with a proconsul, and ἀνθ]ύπατον should be supplied in the first line. The last word is puzzling, and no explanation of it occurs to me. The letter immediately preceding Υ may be Κ or Φ; the former seems more likely. The Η may be a confusion for Ι.

40. A large block of white marble, found in 1883, on the roadway to Lechaeum at the foot of the marble steps leading to the Propylaea. Length, 0.93 m.; width, 0.42 m.; thickness,



Συνα]γωγὴ Ἐβρ[αίων.

0.22 m. The letters are irregularly cut; Γ is 0.065 m. and Β is 0.095 m. in height. The stone is broken at the right, and at the left the inscribed surface is mutilated. The block shows an ornament of dentals and spaces underneath, and was probably a cornice block originally. The left end was afterwards trimmed

and chiselled to fit another block which joined this one diagonally. The stone then formed the base of a tympanum or pediment, and, with each end built into the wall, it probably formed the lintel over a doorway.

We know that there was a Jewish synagogue at Corinth, where St. Paul preached during his sojourn there (cf. N. T. *Acts*, xviii. 4, διελέγετο δὲ ἐν τῇ συναγωγῇ κατὰ πᾶν σάββατον, ἔπειθ' ἐν τῷ Ἰουδαίῳ καὶ Ἑλλήνῳ). If our restoration be correct, this stone was part of that synagogue. The poor cutting displayed in the letters and the use of a second-hand block may point to the poverty of this foreign cult at Corinth. If we may judge from the place where the stone was found (and the size of the block favors the supposition that it had not been moved far), we can place the Jewish synagogue in the region east of the road to Lechaëum, and but a short distance north of the great fountain of Pirene. This district was a residence quarter, as many house walls (cf. *Am. J. Arch.* Vol. I, 1897, pp. 465-467) and the remains of a Roman house with a central court, a few metres north of Pirene, bear witness; we know that the synagogue was in a residence quarter, for when Paul went out from it, after forsaking the Jews who had opposed him, he entered the dwelling of a certain Justus, "whose house joined hard to the synagogue" (cf. N. T. *Acts*, xviii. 7, ἡ οἰκία ἣν συνομοροῦσα τῇ συναγωγῇ). It is not likely that the synagogue was on the west side of the road, for this side was flanked by a colonnade and a series of shops or small buildings close under the hill where stood the old temple of Apollo. The building was probably not more than a hundred metres from the Propylaea which marked the entrance to the market-place (cf. Paus. II, 3, 2, ἐκ δὲ τῆς ἀγορᾶς ἐξιόντων τὴν ἐπὶ Λεχαίου προπύλαιά ἐστι), and in the market-place was probably situated the "judgment seat," τὸ βῆμα, to which Paul was brought by the Jews to be tried before the Roman proconsul, Gallio (cf. N. T. *Acts*, xviii. 12).

41. A piece of moulding of white marble: length, 0.24 m.; height, 0.115 m.; thickness, 0.09 m. Letters, 0.035 m. in height.



θεός.

The letters may, however, form the ending of a proper name.

42. A slab of grayish marble, found in 1899: height, 0.28 m; width, 0.36 m.; thickness, 0.05 m. Letters, from 0.02 m. at top to 0.01 m. in height at the bottom. The letters are very poorly cut, and near the bottom are so worn as to be illegible in part. The stone is broken both at the top and at the bottom.



Εἰ δέ μ]ε [ἀ]λ[λάτ-
 τ]ωσιν (?) βουλ(ό-
 μενοι σὺν ἐμοὶ
 θάπτ(ε)ιν ἄλλον νε-
 5 κρὸν ἐ(ν)θάδ' ἄγοντες,
 μήτ' ἐκείνων ἐπὶ γε-
 ῆς ἔκγονα ἐνκαταμεί-
 νη μ(ή)δ' ἡελίου φάος ἔ-
 ξοχα λά(μ)ψη. Ἄλλ' ἔστι
 10 σοι τόπο[ς ἄλλος (?)] ἵνα θάπτῃ[ς
 συν-έτω διαμεν.
 αθαμων (?)..

It seems safe to supply some subjunctive form in line 1, in order to complete a protasis, the main ideas of which are contained in the participial clauses following the verb. In line 4 the infinitive ending is misspelled, owing to the confusion of ΕΙ and Ι in sound.

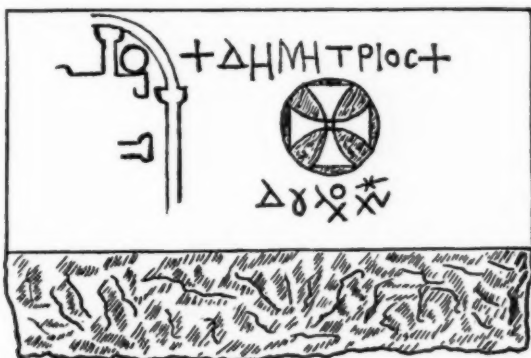
The dropping of the liquids Μ and Ν in the middle of words is to be noticed in line 5, which has ἐθάδ' for ἐνθάδ', and in line 9, which has λάψη for λάμψη.

The Η of μῆδ' in line 8 was omitted by the stonecutter, but was afterwards put in above the line in diminutive form.

The poetical forms γέης (line 6) and ἡελίου (line 8) are probably stereotyped in these curses; the inscription does not resolve itself into verse.

A parallel to this inscription is found in an inscription from Salamis, published in *C.I.G.* 9303. The curse is couched in somewhat different terms: Εἰ δέ τις τῶν ἰδίων | [ἡ] ἑτερός τις το[λ]|μήσῃ σῶμα καταθέσθαι ἐνταῦθα | παρέξ τῶν δύο | ἡμῶν, λόγον δῶν τῷ θεῷ καὶ ἀνάθεμα ᾗτω· | μαρاناθάν.

43. A large block of white marble, found in 1899, at the top of the steps leading to the Propylaea: height, 0.53 m.;



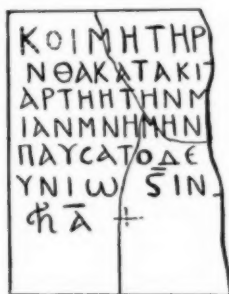
Δημήτριος
δοῦλο(ς) Χ(ριστο)ῦ.

width, 0.805 m.; depth, 1.33 m.; height of inscribed face, 0.37 m. Letters, 0.035 m. to 0.05 m. in height. The block is left rough below the inscribed face; at the left side, along the bottom, is a line of egg-and-dart ornament, showing that the block was originally used for another purpose. There are marks for clamps and fastenings on the upper surface.

A small cross is placed at each end of the proper name, and a Maltese cross in a circle, 0.15 m. in diameter, is engraved in relief between the two lines. Demetrius was evidently a high official in the Christian church at Corinth, possibly a bishop, if we may so judge from the title "servant of Christ," which was commonly applied to such dignitaries.

The marks at the left of the inscription are later attempts at duplicating the large cross.

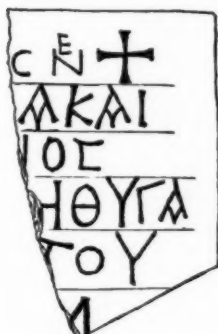
44. A slab of blue marble, broken in three pieces, found north of the fountain of Pirene, in 1900. It is 0.22 m. broad by 0.325 m. high, and is 0.03 m. thick. The letters are 0.03 m. high.



Κοιμητηρ[ίω ἑ-
νθα κατάκι[τε . . (name)
-άρτη ἡ τὴν μ[ακαρ
ίαν μνήμην [ἀνα-
παύσατο δὲ [μην(νὶ) Ἰο-
υνίω ἑ ἰν[δ(ικτιῶνος).
ἡ ᾠ +

A Christian inscription set up in Byzantine times to some woman, . . . -άρτη, "of blessed memory."

45. A fragment of bluish marble, broken from the upper right-hand corner of a slab: height, 0.155 m.; width, 0.10 m.; thickness, c. 0.02 m. Letters, 0.02 m. in height.



.....ς ἐν
 θεῷ (?) ἐνθα κατ]άκαι-
 τε ὁ μακάριος
 καὶ] ἡ θυγά-
 τηρ.... αὐτ]οῦ
 μ.....

For the spelling *κατάκατε*, cf. *C.I.G.* 9132.

This tombstone of a Christian, and also the following ones, probably all belong to the Byzantine cemetery which was excavated in 1901, at the eastern end of the church of St. John Theologos, and south of the vaulted chamber before mentioned.

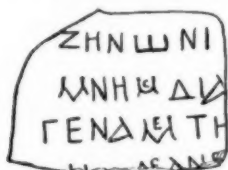
46. A fragment of white marble, broken at the top and on the right side: height, 0.17 m.; width, 0.30 m.; thickness, 0.08 m. Letters, 0.03 m. in height.



.. ΟΙΤΕ [γε-
 νέθλια, ἀ[ναπαύσα-
 το δὲ μην[ι Μαΐω(?)-
 ἰνδικτιῶν[ος —

This last word (Latin, *indictio*) is always abbreviated in other inscriptions, to the first three letters, and filled out as *ἰνδ[ικτι-ῶνος]*. In this, the only case where I have found it spelled out in inscriptions, *Ο* is used instead of *Ω* in the penult; this is probably a mistake in spelling.

47. A small fragment of white marble, found in 1900, in the loose earth taken from the excavations. Its exact resting-place is therefore unknown. It measures 0.13 m. in length, 0.095 m. in breadth, and 0.03 m. in thickness. The letters, in the Byzantine style, are 0.025 m. in height.



Ζήνωνι [μακαρίας
μνήμ(η)ς διὰ [...]
γενναμ(έν)ω(ι) τη[.]

The *Ω* in the form *γενναμένω* is enclosed in the *Μ*, and stands upright upon one side, whereas the *Σ* of *μνήμης* is normal.

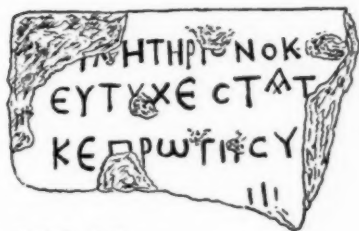
48. An irregular fragment of blue marble, found in 1900, inside the vaulted chamber before mentioned [cf. no. 4]. Height, 0.20 m.; width, 0.28 m.; thickness, 0.10 m. Letters,



Ἐπαφροδ[ίτου Ἀθα-
νοδώρου [κοιμητή-
ριον.

c. 0.025 m. in height. The monogram for *Χριστός* is cut in the lower left-hand corner,

49. A fragment of gray marble, broken at the right side and at the lower edge. Height, 0.175 m.; width, 0.32 m.; thickness, 0.04 m. Letters from 0.02 m. to 0.03 m. in height.



Κοιμ[ητήρι]ο[ν] ὁ Κ

εὐτυχέστατ[ος]

κὲ (= καὶ) πρώτ[η] σύ[ζυγος] (?) or σύ[μβιος] αὐτοῦ . .
[ἐνθα κατέκινται].

50. A fragment of slaty marble, gray in color, broken on all sides, except at the top. Height, 0.09 m.; width, 0.11 m.;

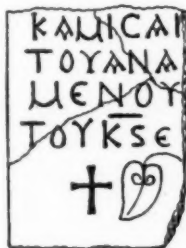


Κοιμ[ητήριον]

ρόντ[ος] καὶ . . . αὐ-
τοῦ ἐνθα κατέκινται.

thickness, 0.015 m. Letters, 0.0275 m. in height. It forms part of the top of the tombstone of a Christian.

51. A fragment of grayish, slaty marble, found in 1901, in the cutting at the west of the vaulted chamber before mentioned, at a depth of 6.00 m. below the surface of the earth. The stone is broken into three pieces, and as a whole lacks the top and right side. Height, 0.215 m.; width, 0.164 m.; thickness, 0.03 m. Letters, 0.025 m. in height. It forms part of the end of an inscription on the gravestone of a Christian.



52. A fragment of gray limestone, broken on all sides, excepting the top. Height, 0.16 m.; width, 0.21 m.; thickness, 0.025 m. Letters, 0.025 m. in height.



53. A fragment of bluish white marble. Height, 0.17 m.; width, 0.14 m.; thickness, 0.075 m. Letters, 0.03 m. in height.



54. A fragment of white marble, of which only the upper edge is preserved. Height, 0.08 m.; width, 0.15 m.; thickness, 0.075 m. Letters, 0.04 m. in height. The forms of the letters seem to indicate that the inscription was in Greek and not in Latin.



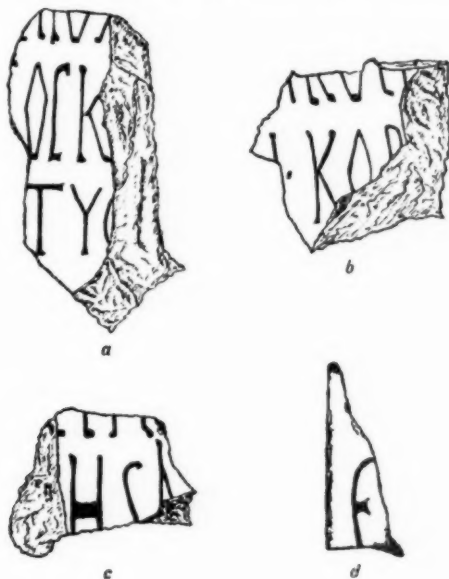
55. An inscription cut on the side of a block of soft sandstone. This block forms part of the foundation of one of four bases for columns, which were set up in later times over the

foundations of an earlier Greek temple of small dimensions. The bases are not in alignment with the walls of the temple. These foundations are north of the fountain of Pirene, and east of the road to Lechaëum. The length of the inscribed face is 0.75 m.; the height, 0.19 m. The inscription is upside down on the block and consists of a series of mere scratches in the soft stone; the letters are about 0.04 m. in height. They may form a proper name.



ΘΕΣΠΕ[Δ]ΟΥ(=Ω)ΠΙΣ(?).

56. A series of four fragments of white, coarsely crystalline marble, found in 1901, in the same place as no. 11. The pieces are irregular chips from a large block whose thickness cannot



be determined, and they cannot be fitted together. The letters are poorly cut and are 0.075 m. in height.

The first piece measures 0.20 m. \times 0.06 m.; the second, 0.13 m. \times 0.11 m.; the third, 0.12 m. \times 0.09 m.; and the fourth, 0.14 m. \times 0.075 m.

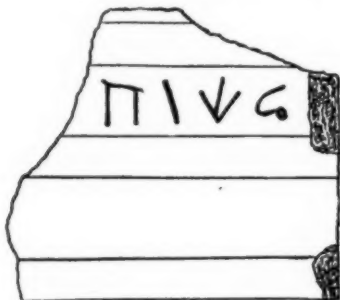
57. A fragment of grayish marble, found in 1900, inside the vaulted chamber before mentioned. Height, 0.19 m.; width, 0.18 m.; thickness, 0.05 m. The stone is broken on all sides, except at the bottom; it is smooth at the back, and the inscribed surface is ruled off into bands. The letters are mere scratches, and are 0.025 m. in height.



... vs βov

... s' Αλέξα[νδρος (?)] ...

58. A fragment of white marble, found in 1900, near the foregoing. It is broken at the top and left side, but is smooth at the back and the face is divided into bands. Height, 0.145 m.; width, 0.14 m.; thickness, 0.05 m. The letters are 0.025 m. in height, but are scratched in a different hand from those of no. 57. They probably formed an adverbial ending.



... -πιώς.

59. A fragment of white marble, broken on all sides excepting the left; found in 1900 inside the vaulted chamber which



is south of the temple of Apollo. Height, 0.055 m.; width, 0.07 m.; thickness, 0.023 m. Letters, 0.025 m. in height.

60. A fragment of white marble, broken on all sides; found in 1900 inside the vaulted chamber which is south of the



... ΙΣ
ΕΙ ΔΕ Τ ...
...

temple of Apollo. Height, 0.105 m.; width, 0.10 m.; thickness, 0.03 m. Letters, 0.025 m. in height.

BENJAMIN POWELL.

Archaeological
Institute
of America

GENERAL MEETING OF THE ARCHAEOLOGICAL
INSTITUTE OF AMERICA

DECEMBER 31, 1902, JANUARY 1-2, 1903

THE Archaeological Institute of America held its third general meeting for the reading and discussion of papers in Princeton, N.J., December 31, 1902, and January 1-2, 1903. The meetings, which were held in the parlors of the Princeton Inn, were presided over by the President of the Institute, Professor John Williams White. On Wednesday evening, December 31, President and Mrs. Wilson, of Princeton University, received the members of the Institute at their home. On Thursday evening the Annual Address before the Institute was delivered by Professor William Watson Goodwin, on *A Recent Visit to Greek Lands*, after which the members were entertained by Professor A. L. Frothingham, Jr.

A resolution was passed thanking the authorities of Princeton University and others for the hospitable reception given to the Institute.

There were four sessions at which papers, many of which were illustrated by means of the stereopticon, were presented. Brief abstracts of the papers, furnished by the authors, follow.

WEDNESDAY, DECEMBER 31. 2.30 P.M.

Address of welcome by President Woodrow Wilson, of Princeton University.

1. Professor Jesse Benedict Carter, of Princeton University, *The Portrait of Virgil*.

The chief literary source for our knowledge of Virgil's portrait is a passage in Donatus's *Vita*; Horace's reference (*Sat.* I, 3, 29) is too doubtful to be of use. Virgil's portrait was common in antiquity; it was used as a frontispiece to his works (*Mart.* XIV, 186) and in schools (*Juv.* I, 225). His bust was in public libraries (*Suet. Calig.* 34) and in private possession (*Lamprid. Alex. Sever.* 31). Up to six years ago our oldest portrait was that of the *Codex Vaticanus*, which represents him as a boy. The picture in the mosaic of Monnus at Trier can scarcely be called a portrait, though it dates next to the *Codex Vaticanus*. The stories of a statue of him at Mantua give us no help. The Mantuan bust is not Virgil, and with this fall the Capitoline and other busts of the same type. None of the so-called "Virgil-gems" is a portrait of Virgil. Most of them do not represent him at all, and those which may be purely ideal.

This dearth of real portraits stands in sharp contrast to the large number of portraits in the printed editions of Virgil. These may be classed under four rubrics: (A) Sixteenth-century groups, where no attempt was made at individuality, but the figures were merely labelled for distinction; (B) Portraits which are dependent upon the so-called "Virgil-gems"; (C) Portraits which go back to the so-called "Virgil-busts"; (D) Purely ideal portraits. Over against all these pretended portraits stands the mosaic of Sousse, discovered in 1896. It is our oldest portrait, and we have every reason to believe it to be authentic. It agrees with Donatus's description, and with the *Vaticanus*. With this mosaic the basalt-bust in the Berlin Museum (No. 291) agrees so strikingly that it may be a Virgil bust.

Remarks were made by Professor Allan Marquand, and by Professor Carter in reply.

2. Professor Frank Frost Abbott, of Chicago University, *The Toledo Manuscript of the Germania of Tacitus*. (Read in abstract by Professor Allan Marquand.)

Manuscript 49, 2 of the Zelada collection of the cathedral chapter library at Toledo comprises 223 folios, the first fifteen of which contain the *Germania*, and bear the date 1474. Like the *Agricola* in the same codex it has a great many variants written on the margin, and shows corrections in three different kinds of ink, although at least two of these sets of corrections are by the original copyist. It shows the errors common to the other *Germania* manuscripts, and, therefore, is derived from the same archetype from which they

come. It stands between Mühlenhoff's B group (*Vaticanus* 1862, and *Leidensis*) and C group (*Vaticanus* 1518, and *Neapolitanus*), but is more closely related to the former than to the latter. That it is independent of both is shown by the variants, and by the occurrence of a few readings which point back to a text antecedent to that of B and C. It probably belongs to the E group, which is made up of *Vaticanus* 2964, *Longolianus*, the Nuremberg edition of 1473, and the Roman of 1474. Its value lies mainly in the fact that it casts the deciding vote when the readings in B and C differ.

Remarks were made by Professor A. Gudeman.

3. Dr. Paul V. C. Baur, of Yale University, *Post-Mycenaean Influence in Cyprus*.

If we wish to deal successfully with the problem, Who were the Mycenaeans? we must not only study the monuments of the period in question, and those of the period immediately preceding the Mycenaean age, but we must also study *post-Mycenaean* influences.

Traces of the Mycenaeans after their expulsion from continental Greece, *i.e.* after the Dorian migration, can be found in the pottery of Aeolis, Miletus, and Samos, in the first half of the eighth century B.C., and in the Cypriote ware of the same period.

In Cyprus, moreover, a few genuinely Mycenaean religious traditions survived even to Roman times. This can be proved by a careful study of certain Cypriote coins, of the period from Vespasian to Caracalla. As an illustration a Paphian coin type (Roscher's *Lexikon*, I, 1, p. 747) was examined with the following results:

The sacred cone of the Paphian goddess, Aphrodite Urania, was preserved as late as the third century of our era, in a typical Mycenaean shrine or reliquary. Similar reliquaries for aniconic images of the Mycenaeans are the dove shrines found in the shaft graves on the acropolis of Mycenae, and the newly discovered fresco from the palace wall at Cnossos (*J.H.S.* XXI, 1901, pp. 192 ff.).

The Roman coin types from Paphos illustrate not only a Mycenaean reliquary, but also show other points of similarity with genuine Mycenaean objects. Such are the aniconic dual pillars in the side chapels of the shrine, the doves perched on the roof, the star and crescent, the enclosure with the gates thrown open.

The star and crescent and the sacred dual pillars are symbolic of the Heavenly Aphrodite and her consort Aphroditus. A female goddess and her male counterpart, as Mr. Evans has made clear, frequently occur in the Mycenaean cult.

Thus we see that it is only with the aid of Mycenaean monuments that we can satisfactorily explain the details of these Paphian coin types. No type more appropriate could have been devised for the commemoration of the celebration of the district festival at Paphos, especially since we have literary evidence that Mycenaean from Arcadia settled there not very long after the Dorian migration.

4. Dr. Edmund von Mach, of Harvard University, *The Origin of the Slandorous Stories concerning Phidias traced to a Corrupt Manuscript*. (Read in abstract by Professor William K. Prentice.)

The high esteem in which Phidias is held, and at all times was held, is not lessened by the slanderous stories against him. Even those who feel bound to believe in them, as a whole or in part, do so half-heartedly, and only because they deny one the right to discredit the cumulative evidence of several ancient writers.

The discrepancy between one story, according to which Phidias was punished in Athens, and a second, which makes him suffer in Olympia, and the clumsy attempt, finally, at reconciliation of these two stories by the invention of a third relating a double punishment, has many times been pointed out—most clearly perhaps in Mr. Gardner's *Handbook of Greek Sculpture*. If one of the three stories is untrue, there is a strong presumption that the other two are nothing but inventions of inaccurate historians, more especially since Plutarch expressly contradicts one of them. Every one of the slanderous stories is based on the assumption that Phidias was found guilty of embezzlement.

A possible explanation of their origin is found in the words of the scholiast on Aristophanes (*Peace*, 605), who, quoting from Philochorus (ca. 280 B.C.),—but in a corrupt text, as is shown by the wrong names of the archons,—relates the accusation of dishonesty and then uses the word *φυγών*. If we may assume that this word originally was *ἀποφυγών* ("was accused"), then the account not only agrees with the version preferred by Plutarch, who says *κλοπαὶ μὲν οὐκ ἡλέγχοντο*, but offers also a suggestion as to how it was possible for different and conflicting stories to grow up in later times; for historians finding a corrupted *φυγών*—i.e. either he was "exiled" or he "fled"—would naturally either reinsert a sentence or two, presumably lost and containing the name of the place to which Phidias was banished and what happened to him there; or reading into the *φυγών* the fact of the conviction of Phidias in Athens, and

well aware of Athenian ingratitude, would invent the tale of his having been put to death in Athens.

5. Rev. Walter Lowrie, of Philadelphia, *Graeco-Roman Textiles*.

A prodigious quantity of so-called Coptic textiles, supposed to date from the late Roman period (third to seventh century), have been unearthed in various burying-grounds in Upper Egypt within the past thirty years and chiefly within the last decade, and are now distributed among most of the museums of the world. The general neglect of these treasures is due to the fact that they are supposed to represent merely a provincial (Coptic) art. It can be proved, however, that they represent the cosmopolitan art and costume of the Roman Empire throughout this whole period. They have therefore the very greatest interest, whether for the technical study of the textile art among the Romans (materials of linen, cotton, wool, and silk are found in the greatest abundance and variety), or for the study of dress both Classical and Byzantine (and incidentally the origin of ecclesiastical vestments), or, finally, for the study of decorative art as exhibited in the tapestries and silk embroideries which decorate most of the garments.

As an example of the importance of these textiles for the study of decorative art, it was shown that they constituted the pattern for the conventional low reliefs which were common from the fifth to the eleventh century, and which during the greater part of this period were almost the sole exponent of the sculptor's art.

6. Professor Allan Marquand, of Princeton University, *A Painting by Hieronymus Bosch in the Princeton Art Museum*.

In the Princeton Art Museum there is a Flemish painting representing Christ before Pilate. It was purchased in London about twelve years ago. The Christ is of the usual Flemish type, but the surrounding figures are strangely grotesque. The painting is attributed to Hieronymus Bosch (1450?-1516). Of the many paintings once attributed to this master, some have perished, and others may be assigned to his followers. There are, however, some nine paintings which bear his signature. With these the Princeton picture has many analogies. The paintings of Bosch fall chiefly in the category of Biblical narratives, although he is better known as a painter of fanciful subjects. He painted various scenes from the Passion, and the picture at Princeton completes the series. The

technical character of the painting corresponds with the work of Bosch, as described by Carel van Mander in 1640.

After this paper, Professor James R. Wheeler, of Columbia University, read a letter from Dr. T. W. Heermance, giving an account of the present state of the excavations at Corinth.

7. Professor A. L. Frothingham, of Princeton University, *New Light on the Earliest Forms of the Christian Church.*

For the three classes of early Christian places of worship — cemeterial chapels, private house chapels, and regular city churches — additional data have recently accrued. The tri-apsidal chapels built for memorial services during the third century in the cemeterial areas are known from three examples in Rome. A well-preserved example (now a Mohammedan chapel) has been noted near Kairwan (Sidi Mohammed-el-Abioui) by Saladin, who, however, erroneously thinks it a Pagan Roman structure. This discovery increases the probability that the *cella Trichora* was the universal pre-Constantinian form for funerary chapels.

The only early private chapel known was one discovered in Rome in 1876 (now destroyed) in very poor preservation, and from apse and frescos evidently post-Constantinian. A rectangular apseless chapel recently found near Via Venti Settembre, with vine-patterned mosaic pavement enclosing an altar compartment with symbolic cross and fishes, now gives the pre-Constantinian type.

Even more important is any proof of the existence of special church buildings before Constantine. It is agreed that during the first and second centuries Christians worshipped almost exclusively in private houses. The controversy rages about the third century, when, according to one school, the independent type of church building was evolved, while according to another it did not begin until Constantine. Even partisans of third-century churches disagree as to their form, Lange believing them one-naved; Holtzinger, three-aisled from the forensic basilica; and Dehio, three-aisled from the private house (atrium-peristyle). The writer showed that Kraus's *a priori* argument against pre-Constantinian churches — that the Christian organization, being held illicit by Roman law, could not build or hold property — was based on the erroneous assumption that Roman laws never became a dead letter; that these laws so remained up to 250 A.D.; and that the decree of toleration of Gallienus in 261 was held to include the permission to hold property, as shown by the decision of Aurelian in 272 regarding the church

property at Antioch (*in re* Paul of Samosata). The wording of the texts regarding the cathedral churches of Edessa (destroyed in 202), of Tyre (destroyed in 303 and rebuilt in 314), of Rome (Titulus Clementis in Trastevere), and of Nicomedia (lofty building, destroyed 303), prove that these were not remodelled private houses, but churches erected for purposes of worship.

None of these and other pre-Constantinian churches mentioned have been found, but their form can be shown to have been ordinarily single-naved, not three-aisled, by the text of the *Didascalia Apostolorum* (third century), describing the arrangement of the congregation in church. This type survived during the fourth century in Syria and North Africa. These churches were usually entered through two doors in the long south wall, an upper one for the men, a lower one for the women, with the occasional addition of a door in the sanctuary for the clergy. The church at Srir (Syria) shows how this type gradually approached the basilical.

Regarding the common fourth-century, three-aisled church a second liturgical document (*ca.* 400 A.D.), the *Testamentum Domini*, recently discovered, far surpasses in importance the already classic text of the *Apostolic Constitutions* for its detailed description of the interior of a basilical church and the arrangement of its annexes — chambers for deacons and widows, refectories, hospitals, arrangements for caring for the poor and sick, etc. A study of this text will be of the greatest help in identifying the details of groups of early church buildings.

Remarks were made by Hon. S. E. Baldwin.

THURSDAY, JANUARY 1. 9.30 A.M.

1. Professor D. Cady Eaton, of Yale University, *The Study of Greek Sculpture.*

The artistic sense is the faculty of apprehending art elements. This faculty is universal, and is to be developed as are all other mental faculties. In the Anglo-Saxon races the artistic sense is by nature weak, and therefore particularly in need of training. The best method of strengthening and purifying artistic perceptions and judgment is in the study of Greek sculpture. The Greeks are the most artistic people of history, and in sculpture is their superiority preëminent and incontestable. The first essential of study is possession of the object to be studied. Every city of sufficient population and wealth, certainly every university, should possess a museum

of casts from Greek sculpture. Greek sculpture may be approached from the point of view of metaphysics or from the point of view of abstract and independent contemplation. These two methods are not to be commended. The very best method of studying a work of art is by drawing with brush or pencil. A second method to be commended is historical and critical investigation. A third method is the use of works of art for purposes of illustration. These methods are simple, practical, easily understood, and within the capacity of every one.

2. Professor Charles Burton Gulick, of Harvard University, *Notes on Greek Lampstands.*

The Greek terms *φάνος*, *λυχνόχος*, *λυχνεῖον*, *λυχνία*, and *λαμπτήρ*, which are employed in the handbooks on archaeology and private life to designate lampstands, are often applied loosely without discriminating between torch-holders or candelabra, lampstands, and lanterns. The words commonly cited for these objects underwent changes of meaning after the classical period, causing much confusion among the lexicographers. Thus *φάνος* (also *πανός*) means "torch" in the fifth century, a bundle of sticks tied together and smeared with pitch or resin. Afterwards the word denoted a portable "torch-holder," recognizable by the cup from which the torch projected (*Arch. Zeit.* XV, pl. xvii), and still later it meant "lantern," or hollow receptacle for a lamp. As such it is used to define *λαμπτήρ*, which, originally applied to a low lampstand, had by the third century come to signify "lantern"; in this sense it was borrowed by the Romans (*lanterna*). The classical word for "lantern," however, is *λυχνόχος*, which is not to be confused with *λυχνεῖον* (Rutherford, *New Phrygichus*, p. 132). That *λυχνόχος* meant "lantern," and not "lampstand," is clearly proved from Pherecrates, *ap. Athen.* XV, 699 f and other passages. For "lampstand" the classical word is *λυχνεῖον*, which in the fourth century becomes *λυχνίον*; we also find the colloquial *λυχνίδιον*. The feminine *λυχνία* was condemned as non-Attic; in *C.I.G.* 3071 (ca. 150 B.C.) it seems to mean "torchholder" (wrongly called *lychnuchus* by Boeckh).

Actual *λυχνία* of Hellenic manufacture are very rare, if indeed they exist. A fragment of Pherecrates (*Athen.* XV, 700 c) makes it appear that they were of Etruscan origin, and in fact most of the specimens prove on examination to be either Etruscan or Roman. Existing lampstands are relatively low, often not a metre in height, whereas those seen in vase-paintings are as high as a man. At first lamps were set on shelves or niches in the wall, as at the entrance to

one of the houses at Delos. In the soldier's tent a stand was improvised by tying three spears together. A review of the specimens in European museums shows that the British Museum contains pieces of three stands that may possibly be Greek (Nos. 193, 247, 284). Those in the Bibliothèque Nationale (Nos. 1481-1484) are either Etruscan or Hellenistic. Helbig, in the *Führer*, 2d edition, notes four which he regards as Greek (*Mus. Greg.*¹ I, lxxx, 2; lxxxii, 3—not 1, as Helbig says; lxxx, 1; lxxxii, 4). Similar to one of these is a stand in the Auguste Dutuit collection at Paris. All of them repeat Etruscan motives so constantly as to throw suspicion on their Greek origin. A systematic review of the vases was not attempted in this preliminary study.

3. Professor Joseph Clark Hoppin, of Bryn Mawr College, *The Greek Colonial Movement as a Commercial Factor.*

According to the contention of Mr. Brooks Adams, advanced in his last book, *The New Empire*, it seems fairly certain that the prosperity of Mesopotamia depended almost entirely on the fact that that country was in the direct line of trade from the Far East on its way to the Mediterranean. The earliest remains in Mesopotamia show very conclusively that such trade with the Far East had existed as early as 6000 or 5000 years B.C. This state of affairs lasted until the eighth century B.C., when a colonial movement, directed by the Asiatic Greeks under the leadership of Miletus, opened up the Black Sea and the Caucasus, and secured a way to the Far East which did not pass through Mesopotamia, while the western market was assured, owing to the activity of the Greeks of Hellas, which resulted in the colonization of Sicily and Magna Graecia. As the two systems came into conflict the Mesopotamian system was undersold, owing to the fact that the Greek route lay for the greater part of the distance by water, and thus made freight rates cheaper, and consequently after another century the cities of Babylon or Nineveh were either destroyed or their former prosperity materially lessened.

The evidence of remains found in Greek and Asiatic soil shows very clearly that after the end of the Mycenaean era commercial intercourse existed between Greece and Asia Minor (Ionian cities), but that until the end of the eighth century there is no trace of any connection between the Greek world and Mesopotamia. The so-called Oriental Influence, which is most marked in the pottery, makes itself felt first at Miletus, then passes to Greece proper, in the Argive (proto-Corinthian) styles, and then appears in the west-

ern world. As this does not occur until after the colonial chain has been established, we can only conclude that the Oriental Influence in Greek Art is entirely due to the increased commercial intercourse with the Far East, and thus with Mesopotamia as well. Until that colonial policy was established, the two regions did not come into contact with each other.

Remarks were made by Professor G. F. Moore.

4. Professor Martin L. D'Ooge, of the University of Michigan, *New Points in the History of the Acropolis at Athens*.

The library of the University of Strassburg has lately acquired a papyrus fragment from Egypt, the *verso* side of which has Greek writing dating from the second half of the first century of our era. The text deals with historical matters, and appears to be of the nature of an epitome.

This papyrus has recently been edited and interpreted by Bruno Keil, under the title, *Anonymus Argentinensis*. His interpretation of the first excerpt is in substance as follows: That a general building commission to superintend the erection of new temples on the Acropolis was appointed, and that ten years after the appointment of this commission the Athenians began to build the Parthenon. Upon the basis of this statement Keil discusses the history of the older Parthenon, of the so-called Cimonian wall of the Acropolis, and of the Periclean Parthenon.

Assuming his interpretation of the papyrus to be correct, he draws from the course of events during the period beginning about 478 B.C. and closing with 447, the date of the beginning of the Periclean temple, the following inferences:

(1) That the older Parthenon was not begun by Cimon, as is commonly held, but by Themistocles and his associates.

(2) That the site of the temple—extending, as it does, fully one-half beyond the edge of the slope of the native rock—required an artificially constructed basis, and that the building of this basis involved tearing down the old Pelasgic wall which guarded the Acropolis on the south side. Accordingly that, when this site for the new temple was chosen, the erection of the Cimonian wall was also planned.

(3) That the appointment of the building commission and the adoption of new plans is to be regarded as the outcome of the General Congress of the Greek States proposed by Pericles. The date of this Congress is probably about 457 B.C., which is ten years before

the Periclean temple was begun, and tallies with the statement of the papyrus. This delay of nearly ten years in executing the plans for rebuilding the Acropolis was due to the many expenditures of the state in this interim.

(4) That the recently found inscription which records the decree for building the temple of Athena Niké, and which is to be dated between 457 and 450, confirms the interpretation of the papyrus, according to which a general plan for rebuilding the Acropolis was adopted as early as 457.

These views were briefly discussed, and in the main approved, the assumption being always that the restoration and interpretation of the papyrus are correct.

Remarks were made by Professor S. G. Ashmore and Alfred Emerson.

5. Professor George F. Moore, of Harvard University, *Baetylia and Other Holy Stones*.

The ancient descriptions of baetylia agree in representing them as small, round stones, usually of dark color, and in ascribing to them peculiar properties. They were believed to have fallen from heaven, to be endowed with motion and speech, to give oracular responses, and to manifest in other ways extraordinary powers. They were especially common in the Lebanon Mountains; but the stone which, in the Cretan myth, Rhea gave Kronos to devour instead of Zeus, was also a *baitulos*. The name is not connected, in our tradition, with the stone at Delphi of which the same story is told. Modern writers often apply the term baetylia to the whole class of holy stones, pillars, obelisks, cones, and the like—an extension for which there is no warrant in either Semitic or Greek antiquity. The misuse of the word can be traced to scholars of the seventeenth century, who derived the widespread custom of anointing holy stones from Jacob's example (*Gen. xxviii*), and saw in the name *baitulos* a reminiscence of Bethel.

Remarks were made by Professor S. I. Curtiss.

6. Professor George F. Barton, of Bryn Mawr College, Director of the American School of Oriental Research in Palestine, *Some Archeological Notes on Asia Minor and Syria*. (Presented in abstract by Professor George F. Moore.)

The notes were based on a trip through Asia Minor during the autumn, and were intended merely as a report of archeological news.

The results of the Austrian excavations at Ephesus, and the German at Baalbek, were briefly described. The present condition of Sardis and its advantages as a site for excavation were dwelt upon at greater length. The paper closed with the mention of a mosaic recently discovered at 'Arrûb, near Hebron. It seems to have formed part of the pavement of an old church, and bears an inscription in corrupt Greek. It has been published in the London *Graphic*, with an incorrect interpretation of its significance.

7. Professor Samuel Ives Curtiss, of the Chicago Theological Seminary, *The Place of Sacrifice among the Primitive Semites*.

There is but one way of determining the place of sacrifice among the primitive Semites, and that is by studying the Semitic type at the stage where primitive conditions may be found. Such a type may be best observed in Syria and Arabia to-day. It is more primitive than any which can be discovered in the literature of the Assyrians or the Hebrews, because this actually exhibits a much later stage. The main difficulties in determining the type through ancient literature arise because a sufficient number of examples do not exist for a satisfactory induction. On the other hand, the investigator who moves among representatives of primitive Semitism can gather manifold examples of every important usage, so that, instead of having a meagre outline of primitive rites, he can draw a complete picture. From this source the following conclusions may be drawn:

(1) The altar for fire offerings did not exist among the primitive Semites.

(2) Sacrifice consisted simply in slaughtering. This is indicated in Arabic, Hebrew, and Aramaic.

(3) The place of sacrifice is simply the spot where the sacrifice may be killed or the animal slaughtered. In Arabic, *madhbah* signifies both "altar" and "slaughter-house."

(4) There are two primitive places of sacrifice: (i) At the shrine of some being who has the value of God to the worshipper, or, at least, of some being of whom he stands in fear. (ii) The other primitive place of sacrifice is at the dwelling of the one offering it, whether that be cave, tent, or permanent building.

(5) Perhaps another step in the development toward the use of an altar as the place of sacrifice is in a custom, especially prevalent among the Arabs east of the Jordan and the Dead Sea, of slaughtering their victims either on a ledge or on stones, or on an elevated rock or a rude table made by a stone resting on two upright stones.

Here my discussion of this subject might end, but I cannot well

pass by some observations bearing on the further development of the altar of the later Semites made during two visits to Petra, and in connection with the study of two high places there.

At the first high place known among the Arabs as *Zuhb artuf*, "merciful phallus," perhaps the name of God, derived from the two monoliths south of the high place, are two altars side by side, cut out of a ledge of rock; one, evidently designed for the immolation of victims, with two concentric pans cut out of the rock, well adapted to catch the sacrificial blood, the other with a cutting in the centre for the sacrificial fire. We seem to have a similar combination in a passage in Ezekiel, where eight tables are mentioned on which they slew the sacrifices, and then four tables for the burnt offerings, of hewn stone (Ezek. xl, 39-42), though the meaning is not altogether clear.

While these observations at Petra may be of interest, among the Syrians and Arabs the only altar found is the place where the victim is immolated.

Remarks were made by Professor G. F. Moore, and by Professor Curtiss in reply.

8. Professor Arthur Fairbanks, of the State University of Iowa, *A Comparison of the Scenes on White Lecythi and on Grave Stelae.*

A comparison of Attic white lecythi with grave stelae shows that many of the same scenes appear on both. The domestic scenes on gravestones of the aediculum type are found on lecythi from the middle of the fifth century B.C., and it may be claimed that the treatment of this scene by the lecythus painter influenced Greek thought of the dead, and so indirectly influenced the sculptors of grave stelae. The same motives led both painter and sculptor to represent those fallen in battle as in the thick of the fight. While scenes on stelae are generally domestic (or scenes of parting) and those on lecythi ordinarily represent worship at the grave, the two lines touch at many points. In some instances the painter of a lecythus copied both stele and scene, or repeated the scene without giving the monument on which it had once stood.

THURSDAY, JANUARY 1. 2.30 P.M.

1. Miss Alice C. Fletcher, Thaw Fellow of the Peabody Museum, Cambridge, Mass., *The Significance of Dress.*

This contribution to the study of the significance of dress was based upon data taken from the religious observances and rituals, the

social usages, and the individual habits of the Omaha Indians and their cognates in the United States. The subject was considered under the following heads:

Personal Significance of Dress: (1) As a mark of personality, born of the desire of a man to be distinguished from the horde. (2) As symbolizing man's dependence upon the supernatural. (3) As a means of proclaiming his achievements.

Social Significance of Dress: (1) As a mark of the clan or the gens. (2) As illustrating the interdependence of men. (3) As exemplifying the growth of personal freedom under the regulating influence of tribal society. This point was illustrated by photographs taken from life.

2. Professor J. R. Wheeler, of Columbia University, *Heraclēs Alexicaeus*.

This was a discussion of the Greek votive relief described by Mr. Edward Robinson in the *Report of the Trustees of the Museum of Fine Arts in Boston*, for 1896, p. 23.

A youthful Heracles stands before an altar which in its design recalls a Doric temple. Upon the altar is a two-handled cup. The inscription ΗΡΑΚΛΕΟΣ ΑΛΕΞΙΚΑΚΟ is cut on the upper step of the altar. The letters show *apices*. The probable date of the inscription is the end of the fourth century B.C., and this is about in accord with the style of the relief, which, however, might be held to suggest an earlier time. A youthful figure stands behind Heracles at the left. This is probably Hermes, though some persons have thought that Iolaus is represented by it.

The relief is Attic, but the figures are of the heavy type which it has been the habit to associate with work of the earlier Argive school. This fact might suggest the possibility of a reminiscence of the Heracles Alexicaeus of Hagelaïdas, which was made for the temple in Melite. But the figures on the relief do not show strongly marked types. They are little more than Attic *ephebi*, and the subject of the scene, in which the wine cup should be especially noted, is probably explained by the gloss of Hesychius, s.v. Οἰνιαστήρια, which runs, Ἀθήνησιν οἱ μέλλοντες ἐφηβείην, πρὶν ἀποκυρῆσθαι τὸν μαλλόν, εἰσέφερον Ἡρακλεῖ μέτρον οἶνου, καὶ σπείσαντες τοῖς συνελθοῦσιν ἐπέδουν πίνειν, ἣ δὲ σπονδὴ ἐκαλεῖτο οἰνιαστήρια. The god is about to accept the offering.

Remarks were made by Professor J. H. Wright, and by Professor Wheeler in reply.

3. Rev. Dr. William Hayes Ward, of New York City, *The Rule of Symmetry in Early Oriental Art.*

The famous Lion Gate of Mycenae has long been considered a peculiarly important specimen of what we have come to call Mycenaean art. Its characteristic is its monumental symmetry, — what anatomists of the human figure call bilateral symmetry, — in which two opposing parts exactly resemble each other, but reversed. Some of the "island gems" show this bilateral symmetry in the arrangement of animals facing each other. But the great enlargement of our knowledge of Mycenaean art by the labors of Schliemann, di Cesnola, Evans, and others, shows us that the spirit of this Mycenaean art was not conventionally stiff, but was very free. It was represented rather by its flounced women in easy attitudes, its cuttlefishes, and its various intricate spirals. Its monumental symmetry was evidently not natural, but was borrowed, and belonged to the farther East.

This symmetry had its origin in the earliest known art of Babylonia. Whether it was Semitic or Sumerian at first I cannot positively say; but we know it best in its Semitic development, which even controlled literature, as in the parallelism of Hebrew poetry.

This fondness for bilateral symmetry in art perhaps had its origin in the drawing of the human figure *en face*. It appears on a stone laver of Gudea's time, which is surrounded by female figures in low relief, with outstretched arms, each hand holding a streaming vase which was also grasped by the adjoining figure. The goddess Ishtar is often drawn *en face*, standing on two symmetrical lions.

Illustrations of this bilateral symmetry from the earliest Babylonian period are very numerous. Such is the seal of Sargon I, perhaps 3800 B.C., with its two admirable figures of Gilgamesh giving drink from a vase to a buffalo. We also have Gilgamesh subduing a buffalo, or a lion, or a human-headed bull. In all these cases the thought is of a single personage repeated, and not of two different ones. Often two lions cross each other, each attacking a bull, and each attacked by a human figure.

This symmetry appears in a multitude of pairs of seated goddesses facing each other, really the same single goddess Gula; two lions under the feet or adorning the chair of the goddess Ishtar; two serpents twined on a column, or held in the hand of a god as a caduceus; two mythological figures with wings, facing each other, or a human face in profile doubled to give two Janus-like faces. Even

when a god and his goddess are figured together they sit facing each other, dressed alike, and distinguished only by the beard.

From Babylonia this rule of symmetry, so early hardened into conventionalism, was adopted from the first in Assyria. A multitude of instances show two identical human or divine figures, or two animals, facing either a sacred tree or a column, as in the Gate of Mycenae, or two figures beneath the winged divine disk. There is hardly anything else but such stiff conventionalities in Assyrian religious art, although we find much more liberty in the historical representations of the campaigns of the Assyrian kings.

These designs passed farther north, from Assyria into Asia Minor, and affected the so-called Hittite art. It was from this source that the Mycenaean art occasionally borrowed it. It appears especially in lions and sphinxes facing each other, and in representations of the winged disk with two human figures.

In the earlier period the art of Elam did not differ at all, so far as we know, from that of Babylonia. Indeed, the two were one country. In the time of the Achaemenian kings of Persia the difference is plainly distinguishable, but the symmetry is quite as dominating, if less varied. We see very little but a crowned god or king, lifting two lions. This appears on the tomb of Cyrus, and on numerous seals.

Remarks were made by Professor S. I. Curtiss and Dr. E. Littmann, and by Dr. Ward in reply.

4. Professor Harold N. Fowler, of Western Reserve University, *The Venus of Milo*.

The inscription of Theodoridas has been shown to belong to one of the herms discovered with the Venus. This proves the correctness of one of Voutier's drawings, thus raising the question whether the drawing in which the inscription of Alexandros from Antioch-on-the-Maeander is connected with another herm may not also be correct. Furtwängler's restoration of the Venus thus becomes less probable. Interesting documents relating to the Venus have recently been published. The date of the Venus is probably the fourth or the third century B.C. The paper was chiefly a review of the following articles: Furtwängler, *Sitzb. Mün. Akad.* 1897, III, pp. 414 ff.; 1900, V, pp. 708 ff.; Michon, *R. Ét. Gr.* 1900, pp. 302 ff.; 1902, pp. 11 ff.; Héron de Villefosse, *C. R. Acad. Insc.* 1900, pp. 465 ff.; Hiller v. Gaertringen, *Hermes*, 1901, pp. 305 ff.; and S. Reinach, *Chron. d'Arts*, July 9, 1898, December 22, 1900, and May 4, 1901, and *R. Arch.* XLI, 1902, pp. 207 ff.

5. Professor Thomas B. Lindsay, of Boston University, *The Basilica Aemilia*.

The paper contained a brief sketch of the history of the building from its construction in 179 B.C. At present about one half of the site has been excavated. The remains brought to light belong to four distinct periods:

(1) Parts of the foundation of the republican basilica, chiefly blocks of gray-green tufa.

(2) Remains of the basilica of the early empire, which show that it consisted, so far as the present excavations go, of a *porticus*, a series of rectangular *tabernae*, and a large central hall.

The few fragments of the *porticus* which have been found correspond with the fifteenth-century drawings and with the *bucranium* which was discovered in 1885. This *porticus* extended from the *Curia* to the temple of Antoninus and Faustina and had fifteen large pillars like those of the Basilica Julia. The *tabernae*, which open upon the *porticus* and of which only the middle one is connected with the main hall, were doubtless used as waiting-rooms, offices, etc.

The main hall, divided into three parts by two rows of columns, was 22 m. wide and probably about 80 m. long; on the floor, which is composed of fine marble blocks, was found a large number of pieces of bronze and iron, coins, nail-heads, etc., half melted and embedded in the marble.

(3) The most striking objects brought to light by the excavations are the columns of red granite, which probably date from a reconstruction of the fourth century of our era.

(4) Probably in the seventh or eighth century of our era a part of the site of the *tabernae* and the *porticus* was used for a rudely constructed two-story building, in which one of the thresholds was formed by a large marble slab taken originally from the *Regia* and containing parts of the *Fasti* of the years 380 and 330 B.C.

6. Professor Tracy Peck, of Yale University, *The Personal Address in Roman Epitaphs*.

Attention was first called to the exceptionally personal and subjective quality of Latin literature. The writers are, in general, so prone to self-revelation and to identifying themselves sympathetically with their characters and situations that the literature is largely autobiographic. With this subjective tendency runs a fondness for the conversational or dramatic method of presentation. Hence the frequent occurrence of personification, apostrophe, solilo-

quy, imaginary colloquies, prayers, imprecations. All this appears in the treatment of the dead as well as of the living. It is not surprising, therefore, to find the same characteristics in Roman epitaphs.

The paper made some classification of pagan epitaphs according to the kind of personal address in them. In very many epitaphs the dead is represented as speaking,—sometimes to set forth his own career and character, sometimes to console surviving relatives and friends, sometimes to appeal to strangers for recognition or remembrance, sometimes to moralize on life—its chances and its end. In other inscriptions the dead is addressed, most frequently in salutations and farewells. Often it is the stone itself that seems to urge the traveller to linger and peruse the epitaph. And the stone is itself entreated to guard its charge tenderly, as the earth is frequently invoked to rest lightly on the dead. In many cases there is a dialogue between the dead and the living, either members of the family or friends or chance passers-by. Again, the address takes the form of good wishes, either from the dead to survivors, or from wayfarers to the dead. Many times the epitaphs contain fearful and definite curses against any who may desecrate the tombs. Other grave-inscriptions express moral reflections on life and mortality.

In conclusion was suggested the value of such epitaphs for enlarging our knowledge of the conjugal and domestic relations of the Romans, of some traits in their friendships, and of their feelings in regard to death, to a future state of consciousness, and to the grateful memory of others as a kind of immortality.

7. Rev. Dr. John P. Peters, of New York City, *Two Tombs from the Necropolis of Marissa*.

In June of last year, 1902, in company with Dr. Hermann Thiersch of Munich, I visited the site of the excavations of Dr. Bliss at Tel Sandahannah in the Shephelah near Beit Jibrin. As a result of these excavations great impetus has been given to private digging by the natives throughout that section of the country. These excavations they have conducted in quite a systematic and intelligent fashion, so far as finding the graves is concerned. They have discovered the necropolis of the city of Mareshah, which the explorers failed to find. For a distance of about two miles north of Beit Jibrin, along the wady eastward of Tel Sandahannah, hundreds of graves of various periods have been dug up, rifled, and their contents destroyed or sold to antiquity dealers.

Shortly before our arrival, two tombs of very unusual character and interest had been discovered. These it is the purpose of this

paper briefly to describe. They were tombs of the Ptolemaic period and of a type somewhat similar to the Ptolemaic tombs in Egypt. They stood at the foot of the hill opposite Tel Sandahannah and the entrances had been concealed by the earth and debris which had washed down from above. Both of these tombs were ornamented within, and also, in one case, at the doorway without, with paintings, and both of them contained inscriptions. In this respect they are practically unique among tombs hitherto discovered in Palestine. The plan of the tombs within is in general a square hall or antechamber, with three rooms opening out of it, two smaller ones to the right and left and the main chamber in front. The burials in these tombs were in *loculi*, with a stone bench in front. There were places for about forty bodies in each tomb. At the end of the main room in both cases were, instead of loculi, larger state chambers, if one may so call them, for the reception of the chiefs of the family.

In one tomb there was a most interesting painted frieze over the loculi in the main chamber, representing more than twenty different animals. The animals represented were, to a considerable extent, African—the elephant, the hippopotamus, the rhinoceros, and the crocodile. One or two were mythical or semi-mythical and one or two apparently imaginative. Over the various animals were inscriptions giving their names. The painting and decoration in general are a mixture of Greek and Egyptian. Among the names of the occupants of the graves which are inscribed, a number are Edomitie. Marissa, the city to which this necropolis belonged, was in the post-exilic period not in the territory of Israel, but of the Edomites, and Marissa itself is called the capital of Idumaea. An inscription over one of the state chambers for the chiefs of the family stated that the occupant of the tomb was the ruler of the Sidonians in Mariseh. This gives us positive evidence that the town lying underneath the Tel of Sandahannah was Marissa, the Mareshah of the Old Testament, the home of the Prophet Micah, and the further interesting information that in the post-Alexandrian period a Sidonian colony had been planted at this place. Outside of the inscriptions recording names were one or two of an erotic character of rather curious interest. The symbolism and decorations of the tomb were interesting also from a religious standpoint.

The second tomb was more artistically decorated especially about the grave of the head of the family. The painting of this tomb was upon plaster, which had been laid on the walls, and not immediately upon the stone, as in the first tomb. Two panels on either side of the main chamber were really graceful and charming works of art,

representing on the one side musicians descending to the door of the tomb and on the other a festival scene in which one of the banqueters pours a libation at the doors of the tomb. Both these panels were, unfortunately, badly mutilated by the fanatical Arabs of Beit Jibrin, because of the human faces and figures which they contained. A number of the inscriptions in both tombs were dated, but the era of all is not yet clear. The tombs belonged to the third or second century B.C.

THURSDAY, JANUARY 1. 8.30 P.M.

The Annual Address by Professor William Watson Goodwin, of Harvard University, *A Recent Visit to Greek Lands*.

By way of introduction, the speaker justified himself, as a classical philologist, for addressing an archaeological audience, on the ground of the distinguished services which the Archaeological Institute has always rendered to classical studies. Its greatest work has been the maintenance of the School of Classical Studies at Athens for more than twenty years, in addition to its important labors in other fields. He alluded to the significant fact that Friedrich August Wolf gave a large and important place in his grand scheme of Classical Philology at Halle to the Archaeology and History of Ancient Art and Architecture. Wolf was the first who ever enrolled himself at a German university as a "student of Philology," which he did in 1777 at Göttingen, to the great consternation of Heyne and the other authorities.

He then gave a brief account of what had especially interested him in a recent visit to Greek lands. He spoke of the rare opportunity afforded by the ugly staging, which has entirely covered the west front of the Parthenon for several years, for photographing the sculptures of the west frieze. These wonderful works of art can hardly have been seen with any satisfaction before this, since the temple was built; and this opportunity has been eagerly improved by all who could gain admission to the platform beneath the colonnade. The new photographs, some of which are very large, astonish and delight all who see them. He then spoke of the beautiful bronze Hermes which was rescued from the sea south of Peloponnesus, and was undergoing restoration last spring in the Museum of Athens. This is generally believed in Athens to have been part of the precious cargo of antique treasures which Sulla sent off from Athens to Rome soon after his capture of Athens in 86 B.C. One of

the famous works of art then sent from Athens was the painting by Zeuxis of the female Centaur with her two infants, described by Lucian; and we know that the ship bearing this and Sulla's other plunder was wrecked near Cape Malea. Kabbadias believes that this statue will take the place among bronzes which the Hermes of Praxiteles holds among marbles.

A short account of Delphi followed, as it now appears after the excavations made by the French. The whole sacred precinct about the temple of Apollo, with the road leading to Arachova, lined by temples, is now open to view; and it is easy to identify almost all the buildings mentioned by Pausanias on both sides of the winding Sacred Way, the ancient pavement of which is now completely uncovered. The great disappointment in these excavations has been the almost complete destruction of the temple itself, of which little now remains above the foundations. It is at least some consolation to know, what we ought to have known before, that this temple is not the famous one built by the Alemeonidae at great cost after the burning of an older temple in 548 B.C., but a much later one, erected in the fourth century B.C., which was spoken of by Aeschines in 339 B.C., in a speech made at Delphi in the spring of that year, as then being a "new temple, not yet dedicated."

In conclusion, attention was called to the great importance which Crete has suddenly assumed as a centre of archaeological interest. The discovery of the wonderful edifice at Cnossos, called the palace of King Minos, by Mr. Arthur Evans, with its labyrinthine mazes of halls and storerooms, often in two, three, or even four stories, gives us a view of the splendor and power of the Mycenaean age which was entirely unsuspected. The most wonderful discovery, one which promises to overthrow many of our ideas concerning alphabetic writing, is that of about 2000 clay tablets covered with inscriptions in an unknown alphabet, which must be either literal or syllabic. Besides the tablets, vases and cups have been found with inscriptions in the same characters, sometimes running round the inside in several lines. This discovery of actual writing, of a date hardly later than 1200 B.C., in a Greek island, traditionally inhabited by men closely connected with the Achaean heroes of the Trojan War, is an event of the first magnitude. We, and perhaps our successors, must look forward most eagerly to the interpretation of these inscriptions, which may throw a flood of light upon the prehistoric age of Greece, and upon the history of the art of writing.

FRIDAY, JANUARY 2. 9.30 A.M.

1. Professor Kirby Flower Smith, of Johns Hopkins University, *The Influence of Art upon Certain Traditional Passages in the Epic Poetry of Statius*.

The influence of art upon Statius, especially the sources of it, was thoroughly investigated by Gaymann in 1896. The object of this paper, however, was not the source, but the effect and meaning of artistic influence in Statius. The investigation, moreover, was confined to those passages which owe their inspiration to literary reminiscence and, more particularly, to a small but important number of passages in which the characteristic feature, the central idea of the tradition, had always remained a homely touch of nature, until finally destroyed in Statius himself by the intrusion of art and mythology.

One passage only was developed in detail. The tradition of it is: Euripides, *Troad.* 556 ff.; Apollonius, *Arg.* IV, 127-138; Virgil, *Aen.* VII, 511-518 (who substituted the Fury for the Dragon, influenced, perhaps, by *Il.* XX, 48 f.); Valerius Flaccus, *Arg.* II, 196-203 (Virgil, with some reversion to Apollonius); Statius, *Theb.* I, 114-122 (Virgil).

The traditional touch of nature (describing the effect of sudden and extreme fright) is represented, for example, by Virgil's line:

Et trepidæ matres pressere ad pectora natos.

In Statius, however, we have:

Ipsa suum genetrix curvo delphine uagantem
Abripuit frenis gremioque Palaemona pressit.

It will be seen that nature, here, has been sacrificed to the gods, and, further, that the gods have struck a conventional attitude. The little Palaemon is driving his pet dolphin with a pair of toy reins (cf. *Theb.* IX, 131; Apul. *Met.* IV, 31; Claud. X, 156). Near by is his mother, Leucothea. Here, arrested for one fleeting moment, is a picture which reminds us of a Campanian fresco. In that moment comes the cry of the Fury. The traditional act of mother love gives the scene life, and the picture dissolves.

Poetry of this sort has an undeniable beauty of its own. Nevertheless it is a symptom of that petrification which finally spread over the whole body of Roman epic after Statius.

2. Mr. Charles H. Weller, of New Haven, Conn., *The Pre-Periclean Propylon of the Acropolis at Athens*.

The principal extant portions of the Pre-Periclean Propylon are: (1) the cuttings in the rock in the great central doorway of the Propylaea of Mnesicles; (2) a portion of the side wall, antae, steps and wing back of the southwest wing of the Propylaea; (3) the corner of the Propylon wing south of the Propylaea.

A small excavation made by the writer in the second area mentioned revealed two fine marble steps under the one before uncovered, rock-hewn steps below the familiar tripod base, a slab of the floor, and the lead-lined socket of an inscription or herm. Measurements with a levelling instrument showed the outer (southern) and inner parts of the Propylon wing to be on the same horizontal plan. This shows an extraordinary difference of level in the case of the *euthyterion* on the two adjacent sides of the southwest wing of the Periclean building. The limits of the Propylon wing can be determined, the end stones being bound by Γ -shaped clamps, which are of value in dating the structure.

Study of the cutting in the rock in the great doorway of the Propylaea determines that the northern limit of the Propylon was at this point. The width of the building being thus determined, the key to the further reconstruction is at hand. The construction of the floor and of the triglyphon confirms the theory presented as to the width. The Propylon fills the angle between the old "Pelagian" wall, and a prolongation of the wall running up from the Beulé gate. It is an interesting fact that the central axis of the Propylon as thus restored meets the façade of the Niké temple at its middle point.

There are reasons for believing that the Chalcidian chariot (Herod. V, 77) stood on the cutting visible along the modern steps up to the Propylaea.

3. Mr. Edward L. Tilton, of New York City, *A Greek Door of Stone at the Argive Heraeum.*

At the Argive Heraeum, among the ruins of the so-called "West Building," are fragments of a stone door and a threshold well preserved. The building may have served as a maternity hospital, since Hera was the patroness of births and marriages, and in two of its rooms are remains of stone couches. The third room may have been a treasury or strong room to receive the money and tokens received from the patients, for it was closed by the stone door under discussion.

The fragment preserves the knob, or pivot, cut from the stone of the door. This pivot measured 0.10 m., or 4 in., in diameter, and revolved originally upon bronze plates, now gone, which fit certain

cuts in the limestone threshold at the entrance to the room. The cuts indicate double or bivalve doors, which were usual in Greece; and according to custom, also, the doors swung into the room. The right-hand valve was used more than the left, as indicated by the greater abrasion of the threshold on that side. A slot in the threshold apparently indicates a bolt fastening, and other cuts show plainly the position of the door jambs, which may have been either of wood or stone. The arrangement of wooden jambs is shown by Dr. Dörpfeld at the Heraeum, Olympia, while Heuzey and Daumet found a tomb at Palatitza in Macedonia with marble doors and stone jambs. These doors are now in the Louvre; they are carved to imitate wooden doors bound with riveted iron bands, and they swing on bronze pivots and sockets very nicely fitted, and were originally supplied with a handle and a latch attached to the marble bosses in the panels. We find similar doors represented on Greek red-figured vases of the fifth and fourth centuries B.C.

The door at the Argive Heraeum is apparently much older than the one from Palatitza or than those shown in the vase paintings, and its date may be assigned to the sixth century B.C., the same as the West Building, of which it was a part.

That the West Building belonged to the sixth century is evident from various indications, such as dovetail clamps, the columns with fourteen and sixteen channels instead of twenty, and the early form of the echinus mouldings of the capitals.

4. Dr. James D. Rogers, of Columbia University, *On the νομίσματα πύργων of Aeschylus, Pers. 859.*

Of the numerous explanations of this enigmatic expression, none has been admitted into the Lexicon of Liddell & Scott. A new interpretation seems therefore to be demanded. Since this expression is used by a Persian, and expressly of Persian institutions, one is justified in looking to Persian soil for an explanation. This theory is based on the supposition that the writer of the *Persians* knew something of the two objects in the Persian dominions which especially attracted the attention of Greek travellers, viz. two types of towers. Both types were imposing and colossal. One type is suggested by the expression, "The Tower of Babel." Herodotus applied to these buildings, — the temples, — the term πύργος. Upon or in these tower-temples were the royal writings. The other type of inscribed towers were those at the city gates and the palace doors. The bases of these towers were flanked by colossal winged figures about whose bodies were long inscriptions which narrated the acts of the kings,

and indicated what was custom or precedent. It appears, then, that the two most conspicuous objects in the region of the Euphrates were these towers which contained the writings of the supreme authority. This is quite unlike Greek custom, and this peculiar feature has been, I believe, indicated here by Aeschylus. νομίματα (or νόμιμα τὰ) πύργων are simply "the custom-laws of the towers." (Cf. *λάγων γένων*, *Agam.* 119.)

5. Dr. George H. Chase, of Harvard University, *An Amphora with a New καλός-Name, in the Boston Museum of Fine Arts.*

A red-figured Attic amphora, of severe style, in the Perkins Collection of the Boston Museum of Fine Arts (P 6516), has on both sides a figure of Athena between Ionic columns surmounted by cocks, very similar to the scheme of decoration upon the obverse of Panathenaic amphorae. The appearance of Athena upon both sides of the vase, the use of the red-figured technique, the absence of the inscription τῶν Ἀθήνηθεν ἄθλων, the height of the vase (0.436 m.), and the fact that the goddess carries her helmet in her right hand and her spear in her left—all combine to show that this is not a true Panathenaic amphora, but an imitation, and it is correctly called pseudo-Panathenaic in the *Trustees' Report* for 1895 (p. 19, No. 13).

The shield of Athena is decorated on the obverse with a Pegasus and the inscription ΠΙΘΟΝ ΚΑΛΕ, on the reverse with an ivy-wreath and ΝΙΚΕ ΚΑΛΕ. Both these inscriptions are, in a way, unique. The words Νίκη καλή appear upon a red-figured hydria in the British Museum (E 251), but are there placed over a figure of Victory, so that the parallel is not very close. The use of this inscription upon the Boston vase is, perhaps, to be traced to the close association of the idea of victory with the Panathenaic vases which the artist was copying. The name Pithon has not been noted before as a καλός name, although it appears in Attic inscriptions (*C.I.A.* I, 433 and 434; II, 966) and, rarely, in literature, being frequently confused in manuscripts with the forms Πύθων and Πείθων. The use of the feminine adjective may be only a careless mistake. More probably, however, the artist wished to stigmatize Pithon as an effeminate dandy, just as Aristophanes speaks of Κλεωνόμῃ (*Birds*, 480), Horace of Pediatia (*Sat.* I, 8, 39), Cicero of Egilia (*De Orat.* II, 277), and Tacitus of Gaia Caesar (*Ann.* VI, 5).

6. Dr. Enno Littmann, of Princeton University, *Archaeological Details from Syriac Inscriptions.*

Among the Syriac inscriptions found by the American Archaeological Expedition to Syria there are a few which are of particular interest from an archaeological point of view. One of them is on the lintel of a small country church in the mountains near Antioch: "In the year 556 according to the era of Antioch was completed this church. And there were spent on it 85 darics and 430 bushels of beans, wheat, and lentils, besides the chief expenses." The sums given in detail were the contribution of the community of the village, the chief expenses were the sums that came from the ecclesiastical centre, Antioch or even Constantinople. The two taken together may have constituted the general building fund, but it is more likely that the darics and the bushels formed the wages of the masons, whereas the chief expenses covered the cost of the raw material and the remuneration of the architect. Another inscription is on a portico used for shops in a town of the same region. It gives the date (547-548 A.D.) and tells by whom the edifice was erected: three "brothers" purchased the land, and a fourth "brother" put up the building. "Brothers" may mean "Christian brethren"; in that case, the establishment was probably a pious gift for the public benefit. Or the term may mean "associates," perhaps "members of a trade-guild"; then we would have here an interesting contribution toward the knowledge of the commercial life in these Syriac cities.

7. Professor Alfred Emerson, of Ithaca, N.Y., *Greek Sculptures in California.*

This was a report on the speaker's purchase of antique marbles in Italy for the University of California. Italy's annual output of fresh material exceeds that of Greece. Export regulations and duties are also less prohibitory.

The series comprises:

(1) Herma of Dionysos, formerly in the Villa Borghese, a work in sixth-century Athenian style.

(2) Herma of Dione, truer to the archaic type. The male figure of this double herma is lost.

(3) Double herma of Dionysos and Dione. Both types reflect something of the Athenian school whose greatest master was Phidias. Headdress is earlier.

(4, 5) Two plinths of long-robed female statues. Archaistic.

(6) Female torso. Resembles early figures found on the Acropolis. Sixth century.

(7) Bearded portrait. Early fifth century.

(8) Helios rising from the sea, and a river-god. Corner slab of a pediment.

(9) Head of Hermes. Resembles the Chinnery marbles in the British Museum. Late copy of a Greek work of the fourth century.

(10) Bust of Artemis wearing a crescent.

(11) Inscribed herma of pseudo-Plato.

(12) Head of a Greek philosopher.

(13, 14) Two torsos of Aphrodite.

(15) Head of a youth. Unfinished.

(16) Head of a nymph, after a bronze original. Recalls the school of Lysippos.

(17) Head of a Bacchante, after an original of the third century.

(18) Head of a little boy, after an original of the second century.

(19) Fountain statue of a small boy. First century.

8. Mr. Howard C. Butler, of Princeton University, *Five Unpublished Churches of the First Quarter of the Fifth Century, in Northern Central Syria*.

These churches are situated in a group of large ruined and deserted towns in the mountainous district east of Antioch (Djebel-Bāriska and Djebel-Halakah), which was visited in 1899-1900 by an American archaeological expedition, of which the writer was a member.

The three chief points of interest in these buildings are: (1) Four of them are definitely dated by Greek inscriptions carved upon the lintels of their portals, which give the year, the month, and, in some cases, the day upon which they were completed; the fifth church being almost certainly datable within the same first quarter of the fifth century—a period of which very few architectural remains have been spared, and falling just a hundred years after the death of the Classic style under the Emperor Constantine, and a century before the birth of the Byzantine style under Justinian. (2) They illustrate a distinct style, fresh and vigorous, which, though partaking of Classic elements, is quite free from decadence, and shows few Byzantine tendencies. (3) Three of them were, in all probability, the work of one architect whose name is given.

The oldest church (401 A.D.) is one of two at Bābiskā. The second (414 A.D.) is a few miles to the southeast at Ksēdjbeh, where there is also a later church. The third (418 A.D.) is one of three large churches at Dār Kita, and was dedicated, according to an inscription, to Paul and Moses. The fourth monument is the baptistry of this church, completed in 421 A.D. The fifth, at Kaşr

il-Benât, is the largest of all, and seems to have been the principal building of an extensive conventual institution. It is not definitely dated, but it corresponds, in all of its details, with the church of Bâbiskā, and an inscription shows, almost beyond a doubt, that it is the work of the same architect.

The four churches are of the same plan and proportions, the ratio of the interior width to the length from the west wall to the apse being that of 3 to 4 in each case. The dimensions of three of them are almost identical. All are of the basilical type, with broad central nave and narrow side aisles separated by columns carrying semicircular arches. The central nave terminates toward the east in a semicircular apse with a half-dome, and the side aisles terminate in rectangular chambers on either side of the apse. A straight east wall joining the two chambers conceals the exterior curve of the apse. The baptistery is square, with a semicircular apse protruding from its eastern wall, and a portal to the west, and one to the north, toward the church. The floor of the apse is sunk to a depth of over four feet to provide a sort of font in which a single candidate for baptism could stand.

Like all the buildings of northern Syria, these churches are constructed of cut stone, in large blocks, laid dry; the roofs were invariably of wood, and have perished. The ornament, which is vigorous and well executed, is confined to the capitals of the nave arcade, the mouldings of the apse arch, and the frame mouldings of the portals, which last are interspersed with bands of geometrical and foliate carving, blending classic and oriental designs.

The architect of the church at Bâbiskā, according to an inscription, was one *Μαρκιανὸς Κῆρις*. The architect whose name appears at ẖaṣr il-Benât is called *Κῆρις*,—undoubtedly the same man. The name of the *τεχνίτης* of the church of Paul and Moses at Dâr Kitā is given as *Κῆρις*, which, like *Κῆρις*, is probably another form of *Κήριος*, and refers to the same architect, or builder; while the church at Ksêdjbeh is referred to in the inscription as *ἔργον Κυρῖλλα τεχνίτου*.

The following papers had been announced but were not read:

(1) Professor Clifford H. Moore, of Harvard University. *The Roman Lares*. (2) Professor W J McGee, of the Bureau of American Ethnology. *Some of America's Contributions to the Principles of Archaeology*. (3) Dr. Ernst Riess, of New York

City, *Archaeology in Caesar's Gallic War*. (4) Professor Charles C. Torrey, of Yale University, *An Old Jewish Weight*. (5) Professor Rufus B. Richardson, of Athens, Greece, *A Group of Dionysiac Sculptures from Corinth*. (6) Professor William H. Goodyear, of the Museum of the Brooklyn Institute of Arts and Sciences, *Association of the Lotus with the Animal Pictures on Early Greek Vases*.

1902
July — December

ARCHAEOLOGICAL NEWS¹

NOTES ON RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS

HAROLD N. FOWLER, *Editor*
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GENERAL AND MISCELLANEOUS

ETHNOLOGY AND ARCHAEOLOGY. — Beginning with 1902, the *Arch. Anz.* will publish brief notices of the proceedings of the Berlin Anthropological Society, so far at least as they deal with Greek and Roman matters. The addresses at the February meeting were on discoveries in Albania (Gradiki, Kruja, Durazzo), and on the Macedonian tumuli, of which the cone-shaped ones are supposed to be tombs, the flat ones, remains of habitations. The pottery in both kinds is the same. (*Arch. Anz.* 1902, pp. 108-109.)

ZEALAND. — **A Bronze Chariot.** — An archaeological discovery of great interest was made a few days ago in a bog in the northern part of Zealand, Denmark. It consists of a well-preserved bronze chariot for votive purposes, with the figure of a horse about 10 inches long in front, and showing an image of the sun of about the same measurement, and inlaid with gold on the one side, placed just behind the bronze horse. The rich spiral ornaments, which cover both sides of the sun image, seem to indicate a very early date for the find. (*Athen.* October 4, 1902.)

NECROLOGY. — **Alexandre Louis Joseph Bertrand.** — The death of the archaeologist A. L. J. Bertrand occurred December 8, 1902. He was born in Paris, June 21, 1820, and was educated at the École d'Athènes. In 1862 he was appointed *conservateur* of the Museum of Saint-Germain-en-

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor FOWLER, Editor-in-charge, assisted by Miss MARY H. BUCKINGHAM, Professor HARRY E. BURTON, Professor JAMES C. EGBERT, JR., Professor ELMER T. MERRILL, Dr. GEORGE N. OLCOTT, Professor JAMES M. PATON, and the Editors, especially Professor MARQUAND. In Professor FOWLER's absence, these departments are conducted by Professor PATON.

No attempt is made to include in the present number of the JOURNAL material published after December 31, 1902.

For an explanation of the abbreviations, see pp. 145, 146.

Laye, and filled that office at the time of his death. Since 1882 he has been professor of Archaeology at the École du Louvre. His first book, consisting of studies in the mythology and archaeology of Greece, was published in 1858. He frequently contributed to the *Revue Archéologique*. He was elected member of the Institute in 1881. (*Athen*, December 13, 1902.) He is succeeded as *conservateur* of the museum by Solomon Reinach.

E. L. Dümmler. — The death of E. L. Dümmler took place at Berlin, September 11, 1902, in his seventy-third year. His great reputation was due chiefly to his editorship of the *Monumenta Germaniae Historica* and the *Poetæ Latini Aevi Carolini* and to his great work, *Geschichte des Ostfränkischen Reichs*. (*C.R. Acad. Ins.*, 1902, p. 495.)

Auguste Dutuit. — The death of Auguste Dutuit, at the age of ninety years, took place at Rouen, July 11, 1902. He had been a collector of works of art since 1832. (*Chron. d. Arts*, 1902, p. 212; *Gaz. B.-A.* XXVIII, 1902, pp. 441 ff.) The conditions under which his collection was left to the city of Paris and a brief description of the collection are given in *Chron. d. Arts*, p. 215, and an enthusiastic tribute to his taste and patriotism by GEORGES CAIN is in *Gaz. B.-A.* pp. 441-448 (2 pls.; 5 figs.).

Stanislao Frascchetti. — We have to record the death of Stanislao Frascchetti, on April 9, 1902, at the early age of twenty-seven. Frascchetti's most notable work was a volume on Bernini. His other writings, chiefly upon Italian sculpture, have been published in *L'Arte* and other Italian journals. (*L'Arte*, 1902, pp. 135-136.)

Felix Hettner. — The death of Felix Hettner at a comparatively early age, on October 12, 1902, is a heavy blow to the cause of Roman art and archaeology on the Rhine. Hettner was a pupil of Usener and Bücheler at Bonn. For more than twenty years he has been director of the Provincial Museum at Trier, and though he has written no large book, he has done work of far more than provincial importance. His museum has grown under his hand to be one of the best, also one of the best-catalogued, in Germany. The *Westdeutsche Zeitschrift*, which he and Lamprecht founded in 1882, has maintained throughout a leading place among German archaeological periodicals, and has contained many excellent articles by himself. Latterly he has been one of the three directors of the Limes Commission, and has been active in editing the results of excavations in the handsome quarto series devoted to the purpose. (*Athen*, October 25, 1902; *R. Arch.* XLI, p. 423.)

Eduard Hula. — Eduard Hula, secretary of the Austrian Archaeological Institute, died September 26, 1902, the day after he reached his fortieth year. He was known as a thorough and able scholar, and was one of Bendorff's most efficient assistants in preparing the forthcoming *Corpus* of Greek inscriptions from Asia Minor. (*Jh. Oesterr. Arch.* I, V, 1902, p. 179; *R. Arch.* XLI, p. 423.)

Eugene Müntz. — The death of Eugène Müntz, "Vice-Président de l'Académie des Inscriptions et Belles-lettres, Bibliothécaire de l'École des Beaux-Arts, Chevalier de la Légion d'Honneur," etc., is a serious loss to the ranks of those who represent in France art-historical studies of the graver sort. The work by which he first became widely known was his *Vie de Raphaël*, the publication of which was followed up by *L'Histoire de l'Art pendant la Renaissance*, *Les Précurseurs de la Renaissance*, *Léonard da Vinci*, and various other volumes of almost equal importance, one of the last being

his *Pévarque*, which he prepared with the aid of the Prince d'Essling. His death occurred October 30, 1902, at the age of fifty-seven. (*Athen.* Nov. 8, 1902; *R. Arch.* XII, p. 422.)

EGYPT

EGYPT EXPLORATION FUND. — *Archaeological Report.* — The *Archaeological Report* for 1901-02 of the Egypt Exploration Fund contains, as usual, a classified bibliography of all branches of Egyptology, including papyri and Coptic antiquities, for the year. Investigations at the temple of Sety (*Abydos*) have been made by A. ST. G. CAULFIELD, illustrated by L. CHRISTIE, and published by Quaritch (pp. 16-17). The excavations at **Psêth Khallaf** and **Reqaqnah** are described by J. GARSTANG (pp. 18-20; reprint from *Man*, May, 1902). GRENFELL and HUNT (pp. 2-5) record the discovery of many papyri in the **Fayûm** and at **El Hibeh**. In the *Nation*, November 27, 1902, LOUIS DYER gives a report of the annual meeting of the subscribers to the Egypt Exploration Fund, held in London, November 7.

Professor W. W. Goodwin, of Harvard University, is now Chairman for the Fund in the United States.

ABUSIR. — *The Temple of Ne-woser-re.* — The fourteenth number of the *Mitteilungen* of the German Orient Gesellschaft describes (with numerous illustrations and five plans) the discoveries at the temple of Ne-woser-re, not far from Cairo. At the end of the way approaching the temple was a paved court with storerooms at each side. Next came a rectangular open court with sixteen monolithic granite columns with clustered shafts (bundles of papyrus), the earliest specimens of their kind (about 2500 B.C.). Behind this was a passage, in which was a niche, probably to receive the great lion found in the court of columns. Many reliefs of excellent workmanship were found. About the temple were many graves of the date of the temple, also of the Middle Empire (about 2100 B.C.) and of later times. After 700 B.C. the Greeks of Abusir buried their dead in the Egyptian manner, but their sarcophagi were ornamented in Greek style, and the objects deposited were Greek. Near the grave of a Greek who used a second-hand Egyptian sarcophagus was found the manuscript of the *Persians* by Timotheus. (*Berl. Phil. W.* November 22, 1902. Cf. *Berl. Phil. W.* October 4, 1902; *Am. J. Arch.* 1902, p. 346.)

ABYDOS. — *A Foundation Deposit Inscription.* — In *J.H.S.* XXII, 1902, p. 377, W. M. FLINDERS PETRIE publishes a Greek dedication to Sarapis Osiris by a tax-collector Dioscorus, rudely cut on five sides of a rectangular block found at Abydos in the ruins of a building of Ptolemy IV Philopator. The stone, originally gilded, is probably a foundation deposit.

BAOUIT. — *Coptic Art.* — In *C. R. Acad. Insc.* 1902, pp. 95 f., is a brief description of a Coptic monastery with much sculpture, friezes, capitals, a carved wooden door, many paintings, etc. The ornamentation shows many Arabic motives. Two scenes represented are (1) St. George destroying a demon represented as a woman and named Alabasria, and (2) a stag surrounded by serpents. The remains were discovered by Mr. Jean Clédat at Baouit, and form the most important monument of Coptic art. *Ibid.* pp. 525-546 (4 pls.) is a much more elaborate description by JEAN CLÉDAT. Two churches and more than thirty chapels have been investigated. The place was a monastery and also a cemetery. The buildings date from the fifth to

the twelfth century after Christ. The style of the very numerous religious paintings is Byzantine in its chief features. Among the works of sculpture is, besides the St. George mentioned above, a relief representing Jonah and the whale. Many more chapels and graves remain to be investigated.

BENI HASSAN. — *Continued Explorations.* — Concession has been granted to a universities and private syndicate to make scientific exploration of the site of Beni Hassan, already well known for its rock tombs and early architectural features. The University museums of Oxford, Cambridge, and Liverpool are definitely associated with the work, which is further supported by the patrons of the fund which last season examined the Old Kingdom sites of Bêt Khallâf and Reqâqnah. The Director of the Society of Antiquaries is again treasurer, and the excavations are being made, as before, by Mr. John Garstang. The preliminary results point to an extensive necropolis of the early Middle Empire. (*Athen.* December 20, 1902.)

GHÔRAN AND NAHAS. — *Tombs and a Temple.* — In *C. R. Acad. Insc.* 1902, pp. 346-359, PIERRE JOUQUET gives a report of two years' investigations in the cemeteries of Medinet-Ghôran and Medinet-el-Nahas, in the Fayûm. At Ghôran many papyri were found. A full report of these is to appear in *B.C.H.* XXV, 1901, pp. 379 ff.

The present report is chiefly occupied with discoveries at Medinet-el-Nahas. In the cemetery for men numerous papyri were found, but none of literary importance. In the cemetery for crocodiles one tomb was full of mummies of cats. A papyrus containing a list of members of a religious association and some rules for their conduct came to light in this necropolis. A temple was discovered which resembles in many respects other Graeco-Roman temples of the Fayûm. The propylon, a small chapel, and the pronaos are of stone, the rest of crude brick. Two inscriptions fix the date of the propylon under Ptolemy Euergetes and give the name of the god, Heron, to whom the temple was dedicated. In Roman times the temple was sacred to Sarapis and associated deities, *συννάοις θεοῖς*. These latter appear to be the Dioscuri-Cabiri. Interesting frescoes of Roman date represent these and other deities and scenes of worship.

TEBTUNIS. — *The First Volume of Papyri.* — The first volume of the Tebtunis papyri contains few documents of literary interest. Two of these, of about 100 B.C., are fragments of an anthology; one, of the early first century B.C., contains epigrams, and a fourth, of the late second century B.C., is a fragment of the second book of the *Iliad*. Of these the most interesting is a fragment of verse containing part of a conversation between Helen and Menelaus. Helen upbraids Menelaus for being about to desert her. The time is after the Trojan War. This is a new feature of the myth. The non-literary papyri are rich in information concerning the internal history of Egypt under the later Ptolemies. The bulk of the collection falls within the period from 120 to 90 B.C. These papyri were found in the winter of 1899-1900 at Ûmm el Baragât (the ancient Tebtunis) in the Fayûm, where they were used as wrappings and stuffings for the mummies of crocodiles. Earlier papyri, from human mummies, and later papyri, from the ruins of the town, will be published in later volumes. [*The Tebtunis Papyri*, Part I, edited by Bernard P. Grenfell, Arthur S. Hunt, and J. Gilbert Smyly. London, 1902, Henry Frowde; New York, the Oxford University Press. xix,

674 pp.; 9 pls. 8vo. University of California Publications, Graeco-Roman Archaeology, Vol. I; also Annual Volume of the Graeco-Roman Branch of the Egypt Exploration Fund for 1900-01 and 1901-02.]

PERSIA

SUSA. — A Greek Votive Offering. — In *C. R. Acad. Insc.* 1902, p. 97, a bronze knucklebone found by J. de Morgan at Susa is briefly described. It has a Greek dedication in Milesian characters. It is dedicated to Apollo, and comes no doubt from the temple at Didyma, which was, according to Herodotus, burnt by Darius in 494 B.C. The discovery of this offering at Susa shows that Herodotus is right in saying that the temple was destroyed by Darius and the plunder carried to Susa. Strabo and Pausanias say Xerxes burned the temple in 479 and carried the plunder to Ecbatana.

De Morgan's Excavations. — In *Records of the Past*, I, 1902, pp. 231-245 (2 figs.), is an account by J. DE MORGAN of his work in Persia. The article is a good résumé of the results achieved, but contains no new information.

BABYLONIA

BABYLON. — The German Excavations. — In *Berl. Phil. W.* October 4, 1902, is a summary of the fourth *Jahresbericht* and the twelfth *Mitteilungen* of the German Orient-Gesellschaft. The excavators have studied the plan of the city of Babylon. In building his palace Nebuchadnezzar's idea was to raise the entire level in connection with the raising of the processional street. The palace contained a vast number of rooms arranged about courtyards. The main hall, at the south of the main court, had a niche in its south wall and three doors in its north front. Here were brick ornaments in the wall presenting the appearance of a colonnade with volute capitals. In no Babylonian palace yet discovered is there any place for a real colonnade. Columns were, of course, well known to the Babylonians, but they did not use them. The temple "Ezida" is being excavated. Its ornamentation is in great part preserved. A piece of wall has a row of beasts in unglazed brick, and upon this is a later wall with rows of ornaments and animals in glazed tiles. The temple is surrounded by many connecting rooms. Many inscribed tablets have been found. At Borsippa (Birs-Nimrud) tentative excavations have been made. They promise good results.

The thirteenth number of the *Mitteilungen* describes further discoveries of the glazed tile ornamentation of the throne hall of Nebuchadnezzar. It is accompanied by a colored plate and drawings. The latter represent a bull and a fabulous creature compounded of parts of a bird of prey, a panther, a scorpion, a snake, a goat, and other animals. These creatures ornamented the wall by the door of the temple of Nana, near the palace of Nebuchadnezzar. (*Berl. Phil. W.* November 22, 1902.)

FARA. — An Early Babylonian Site. — At Fara, about three days' journey southward from Babylon, the German Orient-Gesellschaft began excavations in June, 1902. The objects found, stone knives, objects deposited in graves, and clay tablets with very early Babylonian writing, together with the absence of later objects, seem to show that the settlement was deserted in early times. (*Berl. Phil. W.* November 22, 1902, from No. XIII of the *Mitteilungen* of the Orient-Gesellschaft.)

SYRIA AND PALESTINE

INSCRIPTIONS FROM EAST OF THE JORDAN.—In the *Mittheilungen und Nachrichten des Deutschen Palaestina-Vereins*, 1901, pp. 17-19, CHR. ROHRER publishes eleven inscriptions from the eastern Jordan-country. Two are short Latin epitaphs, the others Greek, votive or funerary or so fragmentary that their contents is not clear. One, from near Dscherasch, mentions a temple of Zeus ἐπικάρπιος.

BEERSHEBA.—**A Byzantine Inscription.**—At the meeting of the Académie des Inscriptions, July 4, 1902, CLERMONT-GANNEAU discussed an inscription found at Beersheba by the Palestine Exploration Fund. It belonged to an imperial edict relating to the payment of revenues. It contains many names of places, and gives important information on the geography and the administration of Palestine. (*C. R. Acad. Insc.* 1902, p. 414.)

BEIT-DJEBRIN.—**Macedo-Sidonian Tombs.**—At Beit-Djebrin, near Tell Sandahannah, the site of the Macedonian town Marisa, two tomb-chambers have been discovered. A complete publication by Peters and Thiersch is to be prepared. The walls of the chambers are painted. In one are many real and fabulous animals, in the other a colonnade crowned with garlands. On one side in this chamber a soldier is represented playing the flute and followed by a female harpist. On the other side are remains of another scene, probably a priest pouring a libation upon the head of a bull. At the entrance of the first chamber are two cocks and some much defaced human figures. Inscriptions give Greek and Sidonian names. One mentions Ἀπολλοφάνης Σεσμαίων ἀρχὴς τῶν ἐν Μαρσίῃ Σιδονίων. The dates are given apparently by the Seleucid era, and later by a Pompeian era. (FATHER LAGRANGE, *C. R. Acad. Insc.* 1902, pp. 497-505. Cf. *Am. J. Arch.* VII, 1903, pp. 89-91.)

GEZER.—**Excavations by the Palestine Exploration Fund.**—In *Athen.* October 4, 1902, R. A. STEWART MACALISTER gives a brief report of his first three months' excavations at Tell-ej-Jezari, the ancient Gezer. Four different occupations are revealed, the first neolithic, the other three of the Bronze Age. The walls of the three upper settlements have been identified. Two burial caves have been found. One of these was apparently excavated by the neolithic inhabitants as a crematorium, and many burnt human bones were found in it. Later it was used by people who did not practise cremation. The burnt bones are found to have belonged to a non-Semitic race, the others to Semites. In the second cave, which was originally a cistern, were found fifteen bodies, and the finest collection of bronze weapons yet found in Palestine. A large rectangular bath has been found, and a magnificent megalithic structure, apparently a temple at which human sacrifices were offered, was in process of excavation when the report was written. So far no datable objects have been found except scarabs and jar-handles impressed with the devices of scarabs. These belong to the Middle Kingdom, — about 2000 B.C. An earlier report, but in some respects more detailed, is in the *Quarterly Statement* of the Palestine Exposition Fund, October, 1902.

JERUSALEM.—**Inscriptions.**—In *B. M. Soc. Ant. Fr.* 1902, p. 151, is a report from FATHER GERMER-DURAND recording the discovery of new blocks of the conduit called "canal de Salomon" with the inscriptions (*centuria*) Pomponi, (*centuria*) Severi, (*centuria*) Vitalis, and (*centuria*) Anton (?).

KAB ELIAS. — Rock Sculptures. — In *S. S. Times*, October 18, 1902, Mrs. GHOSH-EL-HOWIE describes a rock-cut relief near Kab Elias, in Syria. A bull is clearly represented, and closer examination reveals a cow also. The writer believes that these figures are those of the great god and goddess of the Hittites. Under the tail of the bull there seems to be a lion or lioness. At a distance of more than a mile from the bull there is a second relief representing a draped and helmeted female figure. This may be Amurru, the wife of the god Hadad Rimmon.

PETRA. — A Place of Sacrifice. — In the *Mittheilungen und Nachrichten des Deutschen Palaestina-Vereins*, 1901, pp. 21-32 (13 figs.), GEORGE L. RONINSON describes a sacred place on the top of a hill at Petra, which he thinks was the most important sanctuary of Edom. It is approached by steps cut in the rock. Two pyramidal "Masseben" or "Malsteine" are also cut from the native rock. The hill is crowned by a tower of Roman or Nabataean origin. A court 47×20 feet in size is cut smooth, and to the north of this is a shallow cutting about $28 \times 3\frac{1}{2}$ feet in dimensions. Most remarkable is a rectangular altar, 9×6 feet in size and 34 inches high, to the top of which four steps lead. A smaller round altar, a hollow resembling a grave, and a small pond or cistern are the remaining features of this remarkable rock-cut sanctuary. (Cf. *Am. J. Arch.* VII, 1903, p. 84.)

TAANACH. — A Canaanite Burg. — In the *Mittheilungen und Nachrichten des Deutschen Palaestina-Vereins*, 1902, pp. 13-16, Dr. SELLIN gives a brief account of his excavations at Taanach (Ta'annek), a day's journey from Joppa. He has found a Canaanite castle which he dates as early as about 2000 B.C. It contained various images, altars, etc. Eight or ten columns of sacrifice, an Israelite necropolis, and an Israelite place of worship are the most important features of the discoveries. Later buildings afterward stood on the site. (Cf. *Biblia*, October, 1902, pp. 216-217.)

ASIA MINOR

THE PLAIN OF THE CAÿSTER. — Inscriptions. — In the *Revue des Études Anciennes*, IV, 1902, pp. 258-266, A. FOXTRIER publishes eighteen Greek inscriptions from various places in the plain of the Caÿster. All are of late date, and for the most part sepulchral or votive. Two are in Latin as well as in Greek. One of these, from Kutchuk Katefkhes, reads *Imp. Caesar* | [*Augu*]stus | [*finis*] *Dianae* | [*rest*]ituit.

COS. — The Temple of Asclepius. — Rudolf Herzog is proceeding with the excavation of the Asklepieum at Cos. The temple itself has been laid bare, and enough has been found to make its restoration possible, with the exception of the pediments. No traces of pediment-sculptures have come to light. No fragments of the colossal statue of the god have been found, but only several fragments of his snake. The much longer and more difficult task of excavating the temple precincts is in progress. It will not be possible to continue the work for long this year owing to the rains. Indeed, it will require, probably, several campaigns. (W. R. PATON, *Athen*, November 29, 1902.) The temple was 30 m. long by 17 m. wide, and at a later period was the site of a Christian church. (B. *Berl. Phil. W.*, December 27, 1902.)

CYZICUS. — A Prytany List. — In *Athen. Mitth.* XXVI (1901), pp. 121-125, TH. WIEGAND publishes another prytany list from Cyzicus. It is of

the eleventh year of the hipparch Chaireas, who, as is known from lists of his seventh and eighth years, was in office during the reign of Hadrian. The inscription shows the two later tribes, *Σεβαστεῖς* and *Τουλαῖς*, which probably contained the *cives Romani*, holding the prytany in common, and we know from other inscriptions that it was customary for the six earlier tribes to serve in pairs.

EPHESUS.—**The Austrian Excavations.**—In *Jh. Oesterr. Arch. I.* V, 1902, col. 53-66 (7 figs.), a report by R. HEBERDEY is reprinted from the *Anzeiger der phil.-hist. Classe der k. Akademie d. Wissenschaften in Wien*, March 5, 1902, No. VII. The streets of ancient Ephesus and the theatre have been investigated. A long street with colonnades is shown by an inscription to have been named from the emperor Arcadius (395-408 A.D.). Arrangements were made to light it with lamps. A second street crossed this, and a third street, also with colonnades, ran parallel to it. An inscription has shown that the real name of the so-called large gymnasium was *Thermae Constantinianae*. Between the atrium of the *thermae* and the *Arcadiane* (street of Arcadius) was an open court with colonnades on three sides. From the street it was entered by three doors. Opposite the central door was a semicircular *exedra* in the street colonnade. The open court was paved with mosaic, and fragments of colossal reliefs were found in it. The sides extending from the street to the *thermae* were curved. The court measured 40 m. by 37 m. The theatre was found to have been much altered in Roman times. A detailed publication of its remains is soon to appear. A relief found near the theatre represents the upper part of the Polyclitan Amazon. This, and some fine fragments of Ionic architecture, appear to have belonged to an altar. Of the inscriptions found, only two are published: one giving a list of names, the other recording a dedication by P. Rutilius Bassus Iunianus, whose father was clerk in 120 A.D.

The Boy with a Duck.—The more important "finds" made by the Austrian archaeologists in Ephesus are temporarily lodged for exhibition in the "Tempel" of the Vienna Volksgarten. The latest of these is a rediscovered masterpiece of Greek sculpture which originally stood in the splendid market-place of Ephesus. It represents a boy of two or three years old, sitting upon the ground and holding a duck with his left hand, and is supposed to have been a companion work to the 'Boy with the Goose,' by the sculptor Boëthus of Chalcædon, which was praised by Cicero and Pliny, but is only known through later copies. (*Athen.* October 18, 1902.)

ERESUS.—**Ritual Rules.**—In *Cl. R.* 1902, pp. 290 f., W. R. PATON publishes an inscription from Eresus, not earlier than the second century B.C., containing rules about entering a sacred precinct and a temple. Some of the rules define the period of impurity after childbirth, others forbid the wearing of shoes in the temple, the carrying of iron, etc.

LYCAONIA.—**Inscriptions.**—In Part II of 'A First Report of a Journey in Pisidia, Lycæonia and Pamphylia,' *J.H.S.* XXII, 1902, pp. 339-376, H. S. CROXIN publishes 149 grave inscriptions from Iconium and the vicinity, some new, others newly copied; and suggests emendations in a number previously published by himself, by Sterrett, and others. They are of Roman and Byzantine times, and one, of an exiled Moldavian king, as late as the sixteenth century. A new name, *οὐαργδαμόης*, is to be compared with the previously known *οὐαργδῖβασσι*. There is evidence of the very early spread

of Christianity, the first real Greek influence, in this region, and some questions of early church usage are raised. The site of Savatra seems to be fixed in a now deserted mass of ruins.

MILETUS. — The Excavations. — The excavations at Miletus were begun again in October by Dr. Wiegand as director, with the assistance of the architect, H. Knackfuss, and Dr. W. Kolbe. A market-place of immense size has been discovered on the south of the Bouleuterion, the assembly-place of the Council. A smaller *agora* was discovered some time ago on the northern side of the same building. The recently found market is bordered by a colonnade with double rows of marble columns, 14 m. in width. A series of large chambers, presumably sale rooms, has been laid bare. The entire length of the newly found market-place is not yet determinable; the breadth is about 120 m. The excavators are at present busy upon the site of the theatre. (*Athen.* December 20, 1902.)

PALANGAH. — Hittite Monuments. — In *C. R. Acad. Insc.* 1902, pp. 452-454 (plan), is a report of Mr. GRECARD, French consul at Siwās, in Asia Minor, recording the discovery of two Hittite inscriptions and two small granite lions at Palangah, near Darende. One of the inscriptions is the longest Hittite inscription known. The characters are not cut in relief, but in intaglio. The inscription has been removed to Constantinople.

PERGAMON. — Excavations in 1900, 1901, and 1902. — *Athen. Mith.* XXVII, 1902, pp. 1-160 (8 pls.; 15 cuts), contains a report of the German excavations at Pergamon during 1900 and 1901. The report is in six chapters by different authors. I. 'Introduction' (pp. 1-6), by A. CONZE. The new excavations are conducted by Dörpfeld for the Archaeological Institute, instead of the Berlin Museum, with the aid of a special appropriation from the government. Work was carried on only in the months of September, October, and November each year. Beginning at the great southern gate in the wall of Eumenes, the course of the main street up the hill was followed, leading to the discovery of a large Agora of the royal period. From this point the street was traced to the southeast corner of the lower Gymnasium terrace, where was found a fountain and Propylon, through which passed the way to the public buildings on the terraces. Further study of the city wall led to the uncovering of three new gates, two on the northwest and one on the east. Search for fragments of the Great Altar had scanty results. A third edition of the *Führer durch die Ruinen von Pergamon* has been published. II. 'The Geology of the Region' (pp. 7-9), by A. PHILIPPSON. The greater part of the region is of volcanic origin, but there are also freshwater deposits of the lower Pliocene period, and limestone and marble belonging in part to the upper Carboniferous period.

III. 'The Buildings' (pp. 10-43), by W. DÖRPFELD. These are described under seven heads: (1) *The southern gate of the city*, already described in part in *Abh. Berl. Akad.* 1901, pp. 5 ff., has been fully cleared. The road from outside enters the courtyard of the gate by a door in the side wall and leaves it by another door in the same wall but opening inside the city wall. On the opposite side of the court was a colonnade which may have contained a fountain. (2) *The main street of the city*, which led by easy grades (1:9) and many windings to the upper city and the Acropolis, was paved with blocks of trachyte, below which are the drains and earthenware pipes for drinking-water. The numerous cross streets have not yet been traced.

(3) *The second Agora* was a large court surrounded by colonnades from which opened rooms of varying size. Owing to the slope, the southern and eastern sides were high above the level of the street and all that remains are basements opening not on the court, but on the street. On the south side in front of these lower rooms was a colonnade, and it is probable that in the Agora itself the south side did not contain rooms, but a double row of columns, thus enabling the frequenters of the market to enjoy the winter sun and the fine view. Three large chambers on the west side are so well preserved that they have been roofed in and fitted up as a local museum for the exhibition of objects not sufficiently valuable to remove. On the north and west sides of the Agora there are remains of a second tier of rooms above the first. The Agora was provided with water from a rock-cut cistern by a tunnel hewn rather unskilfully in the rock. Probably in the fourth century, a Christian church was built in the court of the Agora. (4) *The buildings in the neighborhood of the Agora* are not fully described, as they have been only partially excavated. (5) *The city fountain* lies at the upper end of the street, close to the towers of the mediaeval fortification. It was a basin 21 m. long and 3.15 m. broad, with walls on three sides and a stone breasting and columns across the front. A further row of twelve columns inside was needed to support the roof of stone slabs. At the west of the fountain was a quadrant-shaped structure, seemingly a propylon, from which two doors and steps led to upper terraces as yet unexplored. (6) *The three new gates* are described and illustrated. (7) On the theatre terrace a portion of the great stoa was cleared, leading to the discovery that it was not three stories high, as Bohn supposed, but five. The modifications of the reconstruction are to be published elsewhere.

IV. 'The Inscriptions' (pp. 44-151), by H. VOX PROTT and W. KOLBE. These are numbered in continuation of the series in *Athen. Mitth.* XXIV, 1899, pp. 164-200. The public documents are for the most part fragments, but two are of great interest. No. 71 is the upper part of a slab containing, in four columns, a law concerning the *Astynomi*, which seems to date from the time of the kings, although the inscription is probably of the time of Trajan or Hadrian. Its provisions relate to the removal of unlawful obstructions from the streets and public places; the repair of streets, which was the duty of the property owners; the repair and use of party-walls; and the supervision of the public fountains, at which it was forbidden, under severe penalties, to water cattle or to wash. No. 72 is an edict, apparently of Hadrian, in which are regulated the disputes between the tradesmen and the public bank, which alone had the right to change money. The dedications (Nos. 73-95) are of little importance. No. 94 is in Latin to Julia Domna, the mother of Caracalla. Nos. 96-106 are honorary, and No. 102 contains mention of the *Πασσαρίαι*, who seem to have been worshippers of Apollo Pasparios, mentioned by Hesychius. Nos. 107-112 are fragments from buildings. In 133 B.C. the rights of citizenship were extended to a large number of residents, and their names were inscribed on the walls of a building on one of the terraces above the Agora. Nos. 113-144 are fragments of these lists, which enable a complete list of the tribes of Pergamon to be drawn up for the first time. Nos. 145-160 are fragments of ephebic lists, and Nos. 161-178 sepulchral. Then follow miscellaneous inscriptions (Nos. 179-189), *graffiti* (190-194), and stamps on utensils.

V. 'The Miscellaneous Objects' (pp. 152-159), by H. THIERSCH. The best piece of sculpture found is the head of Alexander, *Ant. Denk.* II, 48, but of great merit is a torso wearing a cuirass, which shows distinct connection with the style of the Great Altar. The other sculptures are of little value. Many terra-cottas of the usual Hellenistic types were found, as well as lamps, both Hellenistic and Roman, and countless potsherds. The latter seem to be largely of local manufacture, and under systematic treatment should add much to our knowledge of Hellenistic pottery.

VI. A brief note (pp. 159-160) by DÖRPFELD gives an account of the results of the campaign of 1902. The Agora was completely cleared. The Propylon was found to lead on the west to a terrace containing part of a gymnasium, probably that of the boys, and on the north by a vaulted staircase, to another terrace also belonging to a gymnasium, where was a badly damaged Corinthian temple, the walls of which were covered with inscriptions. On a third terrace lay the great gymnasium of the young men, erected in Roman times and already identified by Humann, but which will require several seasons for its excavation. (Cf. *B., Berl. Phil. W.* December 27, 1902.)

PONTUS.—**New Inscriptions.**—In *R. Ét. Gr.* XV, 1902, pp. 311-335, FRANZ CUMONT publishes 54 inscriptions from Pontus, copies of which were sent him by Father GIRARD, professor in the Jesuit college at Tokad. The inscriptions are for the most part Greek epitaphs of late date, both pagan and Christian. A few are metrical. No. 36 is a small fragment of the apocryphal letter of Jesus to King Abgar of Edessa. No. 53 is a milestone of Gordian III, marking the sixth mile on the road from Neocaesarea to Comana. A few inscriptions are votive.

SAMOS.—**The Heraeum.**—In *Berl. Phil. W.* November 22, 1902, CHR. BELGER reports that the Greek excavators at Samos have found twenty bases of columns which were arranged in two rows along the sides of the temple of Hera. At the ends there were three rows. At the north-west corner of the temple a great altar built up in steps is being excavated. In the foundations of the marble temple fragments of an earlier building of poros stone are found. The marble temple is then probably not the temple built by Rhoeus and Theodorus, but a later edifice. The most important result to be hoped from the excavations is the discovery of the remains of the early buildings. In *Athen.* December 6, 1902, the Munich *Allgemeine Zeitung* is quoted as authority for the statements that Kavvadias expected to stop excavations in December and resume them in the spring, that the temple was decastyle, and that the east front (54.5 m. long) and the north side (100 m.) had been discovered. In *Chron. d. Arts*, November 22 and 29, 1902, S. REINACH gives a brief description and history of Samos and the Heraeum, with an account of the investigations and discoveries hitherto made on the island.

TARSUS.—**The Site and Vicinity.**—In *Athen.* December 6, 1902, W. M. RAMSAY describes the site and the vicinity of Tarsus. The city lay at modern Tarsus, some eleven miles up the Cydnus. The harbor was the lake about four to six miles south of the city. The course of the river was changed by Justinian after a flood. Few ancient monuments now exist at Tarsus. The sites of Anchiale, Zephyrion, and Kyinda are determined.

TRALLES. — Important Sculptures. — In *C. R. Acad. Insc.* 1902, pp. 284-287, S. REINACH describes briefly some works of sculpture found in 1902 at Tralles and now in the museum at Constantinople. The first is a nymph half draped, the torso being nude. The head is lacking. In the treatment of the nude and of the drapery the influence of a Greek model not far removed from the Aphrodite of Melos is evident. The second is an almost intact statue of a youth, evidently an athlete, as his ears are swollen from blows. He is wrapped in a large mantle and leans against a pillar, resting after exercise. The head appears to belong to the time of Scopas, and the statue may be an Attic original of the second half of the fourth century B.C. The third is a canephorus of the archaic Ionic type, but not executed before the second century B.C. It is an exact replica of a statue, which lacks the head, found at Cherehell. From the two copies the entire work can be reproduced. The archaizing original must have been a famous work. Various other sculptures were found, among them a beautiful female head of the period before Praxiteles, which betrays imitation of the Amazon of Polyclitus. (See also A. CONZE, *Arch. Anz.* 1902, pp. 103-104; 1 fig.)

Inscriptions. — In *Athen. Mith.* XXVI, 1901, pp. 237-240, are published seven fragmentary inscriptions from Tralles. Five are honorary and two seem sepulchral. It is added that the inscriptions published by KONDOLEON in *R. Et. Gr.* (1901, pp. 303 ff.) were all known through earlier publications.

SCYTHIA AND THRACE

CONSTANTINOPLE. — Euripides before Dionysus. — In *C. R. Acad. Insc.* 1902, p. 319, S. REINACH describes briefly a relief acquired by the museum at Constantinople. It represents Euripides seated in a chair, receiving, in the presence of Dionysus, a tragic mask, which is offered him by a Muse named *Skene*. The relief is "Neo-Attic," of a time about the beginning of the Roman Empire.

The Museum. — In *Records of the Past*, I, 1902, pp. 291-304, is an article by ARTHUR E. HENDERSON on the Imperial Ottoman Museum at Constantinople. The article is illustrated by 19 photographic reproductions, nearly all of which represent monuments in the museum.

THESSALONICA. — A Colony in the Second Century. — In *Berl. Phil. W.* July 26, 1902, P. N. PAPAGEORGIOS publishes a Greek inscription on a column now in the marble casing of a wall in the eastern part of Salonichi. The inscription, which is dated 145 A.D., mentions the *colonia Thessalonica*, which proves that the town had the rank of a colony at that time.

GREECE

ARCHAEOLOGY IN GREECE IN 1901-02. — At Athens. The work of strengthening the Parthenon was brought well toward a close and the rebuilding of portions of the Erechtheum begun. The cella of the temple at Bassae has been excavated and rebuilt at the same time, and the restoration of the Lion of Chaeronea is at least projected. Diving for sunken treasures off Anticythera has been discontinued, but the bronze Hermes has been restored and is now on exhibition. The Central Museum at Athens has come into possession of Mr. Carapanos's valuable collection of bronzes from Dodona and archaic terra-cottas from Corfu, and also now exhibits a series of early vases from Phylakopi, Melos.

Mr. Evans's "Minoan" excavations at **Cnossus** are as productive of marvels as ever, chief among them being, perhaps, the discovery, within the palace, of an actual shrine of the Double-axe, of late Mycenaean period, with all the cult objects. A miniature terra-cotta dove-temple was found in the pre-Mycenaean stratum. Among the frescoes are scenes from circus shows or bull-fights, with boy and girl performers, and a view of a street showing houses of two or three stories with masonry, woodwork, and plaster plainly distinguished, and even windows with four or six panes, perhaps of oiled parchment. There are some marvellous specimens of the goldsmith's art, and a series of jointed carved ivory figurines of great interest. There are many fresh inscribed tablets, the subjects of which at least are evident, while some linear characters on a Mycenaean vase and inscriptions written inside of cups are wholly new. Underneath the Minoan palace is a whole system of chambers and magazines of an earlier palace, with remains of Kamarais pottery of extraordinary delicacy and beauty. Fragments of Liparite obsidian show there was commercial intercourse between Crete and the Italian islands in the third millennium B.C. Even beneath this stratum there are the remains of an earlier, neolithic settlement from which numerous small objects have been obtained. The area of the Minoan palace has not yet been defined and the search for tombs must be renewed. The work of the British School at **Palaiokastros**, a deserted bay of eastern Crete, has brought to light an important Mycenaean town. The houses have Kamarais and Cnossian, but not strictly Mycenaean, pottery. Much interest attaches to the clearly seen plans of the houses, which had megara, impluvia, bath-rooms, upper stories, etc. A series of cemeteries gives much information as to local burial customs at various epochs. There was a practice still surviving in the region of disinterring the bones after a period of decomposition, and preserving them in coffers, or depositing them in large mingled masses. At **Phaestus**, remains of a palace of the Kamarais period, destroyed by fire, are found beneath the present structure, itself pre-Mycenaean. In a summer residence a few miles away, the rooms seem to have been left undisturbed since the flight of the owner, and they contain many minor objects and works of art which will be most instructive.

The season at **Corinth** has brought to light a late Hellenic stoa, a Hellenic bouleuterion, a fifth-century Greek stoa, several water conduits, an abundance of archaic pottery, and some sixth-century inscriptions. A museum has been erected here, and one also at **Delphi**. At **Argos**, on the hill *Aspis*, a member of the French School has excavated pre-Mycenaean, Mycenaean, and Greek remains of buildings and pottery. At **Leucas**, the search for Homer's *Ithaca* has revealed a considerable prehistoric settlement and an ancient terra-cotta conduit which may be the *τυκτὴ πηγή* of the *Odyssey*. In **Thessaly**, Dr. TSOUNTAS finds further prehistoric remains, including a megaron with opisthodomus. Halmyros will be the place of deposit for Thessalian finds. In a hillside cemetery in **Thera** a remarkable series of graves shows how the various types of shaft and chamber tombs, tholos-tombs, etc., are related, and are developed from a primitive attempt to shelter the burial offerings. (R. C. BOSANQUET, M. N. TOD, *J.H.S.* XXII, 1902, pp. 378-394.)

Work of the Greek Archaeological Society. — In the *Πρακτικά* for 1901 (Athens, 1902) the work of the Greek Archaeological Society in 1901

is recorded. A general statement is given by P. KAVVADIAS, pp. 9-19. The Society maintained its activity in establishing local museums and in protecting and preserving ancient monuments. Excavations were carried on at eleven different places: three in **Athens**, where the peribolus wall of the Olympieum was examined and restored (G. NIKOLAÏDES, pp. 29-30), the excavation of the stoa of Attalus was almost completed (K. D. MYLONAS, pp. 31-32), and the earth near the Propylaea at the western end of the Acropolis was cleared away; at the cave of Pan on Mt. **Parnes**; at **Thermus**; at **Megalopolis**; at **Dimini** and **Sesklo** in Thessaly; at **Chalcis**; at **Mycenae**; and at **Epidaurus**.

The Society has in view the following works: (1) The restoration of the temple at Phigalia. (2) The rebuilding of the lion of Chaeronea, from the fragments on the ground. (3) The thorough cleaning and largest possible restoration of the Erechtheum. (4) The complete excavation of the Olympieum at Athens. (5) The completion of the excavations now in progress, especially at the Heraeum of Samos. (6) The complete removal of the rubbish heaps from the walls of Mycenae. When these undertakings are completed, an Archaeological Congress is to convene at Athens. (*B. Berl. Phil. W.* December 27, 1902.)

ARGOS. — Excavations. — The first season's excavations at Argos conducted by Mr. Vollgraff have uncovered the ancient citadel, with walls of various epochs. A bouleuterion, a royal palace, five beehive tombs, one of which is still adorned with paintings, cisterns, a small temple of the classical period, inscriptions relating to a sanctuary of Apollo, various terra-cottas, vases, statuettes, architectural fragments, etc., have been found. The remains of the "Mycenaean" period are the most important. (*R. Arch.* XLI, 1902, pp. 429 f. from *Chron. d. Arts.*)

ATHENS. — An Archaic Statue. — In 'Εφ. 'Αρχ. 1902, pp. 44-50 (2 pls.; 1 plan), P. KAVVADIAS publishes an archaic statue found in 1900 at a place called Βολομάνδρα, near Κουβαρά-Καλύβια, in Attica, and now in the National Museum at Athens. The statue represents a nude youth and is the seventh example of the "Apollo type" in the museum. The place of its discovery is an ancient necropolis. This type was an "objective" representation of a man, and might be used as a funeral monument, a commemorative statue, or a votive offering. If so designated by an inscription, it might represent a god. Similarly, such female figures as those found on the Acropolis at Athens might be used for various purposes, but in themselves represented merely a woman, not any definite person. Such statues men offered to a god merely as ἀγάλματα, objects of delight. The newly published statue belongs to about the middle of the sixth century B.C. The proportions are slender, though the shoulders are broad. It shows special affinity with the statue from Melos and the one from Thera, but is a finer piece of work than even the "Apollo" of Tenea. A peculiar detail is the treatment of the hair above the forehead. Here the locks do not curl, but are turned up over the band (ταυρία) and end in points like tongues of flame.

The Building of the Erechtheum. — In *Athen. Mith.* XXVI, 1901, pp. 223-234, W. KOLBE publishes a new fragment of the inscription relating to the building of the Erechtheum, *C.I.A.* I, 324, which though fragmentary shows that the archon's name was Euctemon, and that consequently Kirch-

hoff was right in assigning the document to the year 408-407 a.c. This leads to a new examination of the whole series of fragments with a view to determining their probable order. The result is to confirm the arrangement already divined by Kirchhoff. The accounts relate to work on the north wall, which was completed early in 407, the east porch, and the ceiling and decorations of the interior. In the latter part of the year, the work seems to have been pushed with great energy. The original inscription was in nine columns, engraved on a large central slab 0.92 m. high, with a smaller slab on the top and on the bottom.

Architectural Decoration of the Erechtheum.—In removing some walls behind the Erechtheum fragments of the architectural decorations of that building have been found. (*Athen. Mith.* XXVI, 1901, p. 235.)

A Fragment of the Tariff of Diocletian.—In 'Εφ. 'Αρχ. 1902, pp. 11-16, ROBERTO PARIBENI publishes a fragment of Diocletian's edict regulating prices (*de rebus venalibus*). The fragment is in the epigraphical museum at Athens (No. 2078), and although the place of its discovery is not recorded, it was probably found at Athens. It contains in imperfect condition lines IX, 5 to X, 1a in the edition of Blümner and Mommsen (Berlin, 1893). The last five lines are new in the Greek text, but were already known in Latin. The peculiarities of the new fragment are carefully noted.

Discoveries on the Slope of the Acropolis.—Further results of the German excavations on the west slope of the Acropolis are published by C. WATZINGER, *Athen. Mith.* XXVI, 1901, pp. 305-332 (21 cuts). This article is devoted to the miscellaneous objects, including sculpture, found outside of the precincts of Dionysus and Asclepius. The discovery of much unfinished sculpture, for the most part of little value, indicates the presence of workshops in this quarter of the ancient city. One group, in which only the figure of Dionysus has been worked out, is evidently from the same original as the statue in Venice (Dütschke, *Ant. Bildw.* V, 149). Interesting is a "Hellenistic" relief, representing a peasant at work in the field. The remains of household furniture from the Roman period are scanty and unimportant. Five tiles with palmette decorations in relief and the names of the makers are described. The remaining monuments are classified under (1) Sculpture, comprising fourteen pieces, chiefly heads, among which are two Roman portraits, probably of Julia, daughter of Augustus, and of the elder Agrippina. (2) Reliefs; five in number, one of which, representing an adoring before a youthful mounted hero, is of interest as an addition to the small number of certain Attic heroic reliefs of the Greek period. (3) Varia, including five numbers. Among these are an alabaster statuette of Tyche (?), a rock-crystal group of Heracles and the lion, and a singular terra-cotta male head of life-size, which was found in a house with a number of terra-cotta moulds and fragments of statuettes, and has been interpreted by Wolters as the guardian daemon of the pottery.

Gift of the Carapanos Collection.—The important collection of bronzes, terra-cottas, and other objects, found by Mr. Constantine Carapanos, has been presented by him to the National Museum at Athens. The collection, the most important part of which comes from Dodona, is briefly described by R. B. RICHARDSON in the *Independent*, August 28, 1902.

Meetings of the German Institute.—At the open meetings of the German Institute in Athens during the winter of 1901-02, the following papers

have been presented: December 9, Winckelmann's Day: W. DÖRPFELD, 'Report of the Work of the Institute during 1900-01'; A. WILHELM, 'The Oldest Greek Letter'; W. DÖRPFELD, 'The Excavations at Pergamon during 1901.' December 23: G. SOTERIADES, 'Monuments and Inscriptions of Thermion'; W. DÖRPFELD, 'Excavations in Leucas during the Summer of 1901.' January 2: H. VON PROTT, 'The Cult of the Attalidae'; H. SCHRADER, 'A Statuary Group of the Eleusinian Gods.' January 22: W. DÖRPFELD, 'The Peloponnesus in the Mycenaean Age'; H. THIERSCH, 'The Excavations at the Temple on Aegina.' February 5: W. DÖRPFELD, 'The Channel between Ithaca and Leucas, and the Temple of Aphrodite Aenaeas'; W. KOLBE, 'The Astynomi-Inscription from Pergamon.' February 19: H. VON PROTT, 'Greek Epigrams'; H. SCHRADER, 'Pediment and Frieze of the Hekatompedon.' March 5: A. WILHELM, 'Inscriptions from Athens'; W. DÖRPFELD, 'Troy in Reality and in Homer.' March 19: E. PFUHL, 'Graves-reliefs in Alexandria'; W. DÖRPFELD, 'New Excavations in Leucas.' April 2: W. DÖRPFELD, 'Excavations at Leucas'; W. KOLBE, 'The Phylae of Pergamon'; H. SCHRADER, 'The Great Altar of Pergamon.' (*Athen. Mitth.* XXVI, 1901, p. 428.)

CHALCIS. — **Inscriptions.** — In 'Εφ. Ἀρχ. 1902, pp. 29-42, G. A. PAPA-BASILEIOS publishes four inscriptions from Chalcis. The first is a fragment of a stone inscribed on both sides. On one side are rules prescribing the kind of sacrifice to be offered to each of the gods and heroes worshipped at Chalcis as well as the proper manner and time for sacrificing. On the other side the parts of the offerings which are to be taken by the priests and officials are mentioned. The inscription is very fragmentary. The second inscription is also fragmentary. It seems to have been a dedication to Isis. The third is a dedication to Artemis Eileithya; the fourth reads simply *Ἀντίμαχος Ἀντίμαχον χαίρει*.

Excavations in 1901. — In the *Πρακτικά* for 1901, pp. 43-45, G. A. PAPA-BASILEIOS reports on excavations at Chalcis in 1901. Many graves were opened. In these were numerous vases, some of which had red figures on a white ground, and a number of leaves of gold. On one grave was a stone siren of Roman date. In a cave were found various indications of human occupation, among them fragments of pottery of very early ("Cycladic") times and a rude marble idol. In the church at Ἄνω Βάθρα is an inscribed slab; but as the slab forms the altar, only three words of the inscription (ΑΗΤΟΙ ΑΡΤΕΜΙΔΙ ΑΠΟΛΛΩΝΙ) could be read.

CORINTH. — **The American Excavations in 1902.** — In the *Nation*, July 14, 1902, R. B. RICHARDSON gives the chief results of the excavations carried on from the beginning of March to June 14, 1902. A long Greek stoa, over 100 m. in length, was found and partially excavated at the south side of the temple hill. It had Doric columns at the front and an interior row of Ionic columns. Eighteen Roman vaulted chambers were excavated. A second Greek stoa, even larger than the first, but very ill preserved, was found further east. Behind the Greek stoa was a Roman stoa, standing higher up the slope. Near the southeast corner of the hill great quantities of Corinthian and "Protocorinthian" pottery, terra-cottas, several inscriptions (some of very early date), and two hundred terra-cotta lamps of dates from the sixth century before to the fifth century after Christ, were found. A deep trench dug in the theatre from what appeared to be the centre of the

orchestra to the middle of the stage building laid bare many walls which can be understood only after more complete excavation. Here, too, the best marble head yet found at Corinth was unearthed. On the whole, this year's results have been most encouraging.

CRETE. — CNOSSUS. — Excavations in 1902. — The fresh campaign of excavation was opened on February 12, 1902, and continued till the end of June; as many as 250 workmen being constantly employed for a large part of that time, including over a score of carpenters and masons. Owing to the constant need of supports for the upper stories, the unexpected extension of the Palace on the eastern side, and the vast masses of earth that had to be removed on one part of the site, the work has been arduous and costly beyond all expectation, but the discoveries made have not fallen short in importance of those of the preceding years. Mr. Evans was assisted as before by Dr. Duncan Mackenzie in directing the works, and by Mr. D. T. Fyfe on the architectural side.

The greater part of the Palace, embracing an area of about four and a half acres, has now been uncovered. Important new rooms were uncovered adjoining the halls and "grand staircase" excavated in 1900, and it has been possible to preserve a great part of the upper story throughout the whole region. A very interesting feature was the complete system of drainage, including latrines with flush-pipes, and a succession of stone shafts descending from the upper floors to a network of stone ducts beneath the pavement of the lower rooms, large enough for a man to make his way along them. Another highly interesting feature of this part of the building was a shrine belonging, in its existing state, to the late Mycenaean period, with the cult-objects and idols in place. A painted clay figure of a goddess, cylindrical below, bore a dove on her head. The central cult-objects seem to have been double axes, rising between two pairs of sacral horns wrought in stucco. Each of the latter showed the socket for the handles of the cult-object between the horns. A small double axe of steatite lay against one pair of horns. A miniature Pillar-Shrine of the Dove-Goddess in painted terracotta was also found, belonging to the pre-Mycenaean period.

Fresh fresco paintings were discovered, including one of a lady in a very modern jacket; dolphins and other fish; and naturalistic foliage and lilies. Fragments, previously found and now put together, give exciting scenes from the Bull Ring, in which girls as well as male toreadors took part. Very beautiful ivory statuettes also seemed to represent similar figures in violent action. Further large deposits of tablets inscribed with the linear prehistoric script came to light, mostly referring to the royal inventories and accounts, and concerning the armory, granary, and other departments — many of them dealing in percentages. Clay cups were also found with ink inscriptions, a new departure in the prehistoric script.

The exquisite ivory figures of youths showed the "art of Daedalus" in its highest perfection, displaying naturalistic details not found again in such work till the age of the Italian Renaissance. Another extremely interesting find was the remains of a large mosaic of porcelain plaques, many of them representing houses, so that a whole street of the "City of Minos" as it existed about 1500 B.C. could now be reproduced. Here, too, were strangely modern features, — houses of three stories, some with two doors, and showing windows with four or six panes, — oiled parchment having perhaps been

used in place of glass. The whole seems to have formed part of a large design showing scenes of peace and war analogous to those of Achilles' shield.

The palace was found to climb down the eastern slope of the hill to a point about 80 m. below the northern entrance, the lowermost terrace having been supported by a quadruple line of wall. On the slope underneath the later Mycenaean Palace were found extensive remains of the magazines of what seems to have been an earlier royal dwelling going back into the third millennium B.C. In these were found beautiful painted vases, many of them of eggshell-like fabric, and some embossed in imitation of metal work. The high civilization of the kings of Cnossus is thus carried back to about 2500 B.C.

Below this again, fresh explorations were made of the deep Neolithic stratum which underlies this whole site. These explorations were productive of a fresh harvest of stone implements, pottery, and primitive images of clay, marble, and shell.

The excavation of the southeast corner of the palace has still to be completed, and certain works of delimitation must be carried out in other directions. The lower strata of the palace have also to be explored at several points, and continued researches into the Neolithic deposit are also desirable, as well as the examination of some neighboring buildings, and a renewed search for tombs. Unfortunately, as already stated, the total amount that the Cretan Exploration Fund — including the grant from the British Association — was able to contribute toward the year's expenses has again fallen far short of what the explorer has been called on to expend. (*Circular of the Cretan Exploration Fund*, December, 1902.)

CRETE. — PALAEOKASTRO. — Excavations in 1902. — The plain of Palaeokastro lies north of Zakro and northeast of Praesus. There seems to have been no large settlement here from Mycenaean times until the middle of the nineteenth century; but in that early age it was one of the principal centres, perhaps the capital, of Eastern Crete. The excavations were rewarded by the discovery of a Mycenaean town extending over an area of at least 500 by 300 yards, and of cemeteries which throw new light on the burial customs of the earliest inhabitants.

The largest of the houses which were examined lies inland, in a group of what appear to be spacious upper-class houses; they are constructed partly in the "megalithic" style, characteristic of the Mycenaean homesteads so common in the limestone districts of Crete, partly in regular ashlar masonry; the upper story, where one existed, was of brick. The plan of this house is perfectly intelligible, and in some respects anticipates that of the Greek house of classical times. In all, thirty-six rooms were excavated here. The house was originally one-storied, but later an upper story was added in brick, with two staircases leading to it, and some of the ground floor rooms were converted into magazines, one of which has a plaster floor painted in colors, and a stone bench against the end wall. This and an adjoining chamber yielded over 500 vases. Among the smaller "finds" are a well-preserved tablet inscribed with characters in a linear script nearly related to that of Cnossus, a pair of "sacred horns" in stucco, and jars containing wheat and two kinds of pease.

Still more important results were obtained in the cemeteries. Hitherto we

were very imperfectly informed as to the method of sepulture practised by the Cretans of the Kamarais period; and graves containing Kamarais pottery were practically unknown. Of the "beehive tomb," the typical tomb of Mycenaean times on the mainland, only one example was discovered. As a rule, the Mycenaean inhabitants seem to have laid their dead in earthenware *larnakes* grouped in small family burial-places near their homesteads. These had contained not complete corpses, but bones which were removed from the earth when time sufficient to decompose the body had elapsed after the original interment. A similar custom still prevails in the island.

A still older form of this practice was illustrated by a very remarkable enclosure discovered on the ridge which cuts the town-site in two. It is a rectangle measuring twenty-seven feet by thirty-two, enclosed by a wall of rude limestone blocks, and subdivided by similar walls into five parallel compartments, within which were packed skulls, bones, and vases, principally cups. The date of the deposit is given by the vases, many of which are good examples of Kamarais ware. The bones were in heaps or bundles, not laid in their natural order. Sometimes the principal bones were formed into a kind of bed on which several skulls were laid. A second and apparently similar bone enclosure has been discovered and will be excavated next spring. (*Circular of the Cretan Exploration Fund*, December, 1902. Cf. R. C. BOSANQUET, *Biblia*, 1902, pp. 278-282; reprinted from *Man*.)

CRETE. — PHAESTUS. — The Necropolis and a Palace. — In February and March, 1902, the Italian archaeologists continued their investigations in the necropolis of Phaestus. Excavations were conducted at several points, resulting in the discovery of several tombs, containing mediocre vases of geometric decoration. The native superintendent of antiquities excavated twelve tombs, nearly all of the common *θάλος* type, containing a rich equipment of bronze vases, swords, mirrors, etc., and excellent examples of terra-cotta vases representing the transition from the Mycenaean to the geometric period. (G. GEROLA, *Rend. Acc. Lincei*, 1902, pp. 318-333; plan; 5 figs.) In May and June, 1902, the excavation of the palace on the third acropolis was completed, and further exploration of the necropolis brought to light another *θάλος* tomb. In the suburb of Haghia Triada a small Mycenaean palace was partially excavated, showing a plan and methods of construction like those of the palace on the acropolis of Phaestus. There is a small *μέγαρον* surrounded by other rooms; also two sanctuaries, containing votive offerings. Five tablets were found, inscribed with Mycenaean characters, and more than four hundred pieces of clay stamped with a seal and with letters that will be valuable for the study of primitive Cretan writing. Several stone vases were found, including one of black steatite, with figures in relief, — a masterpiece of Mycenaean art. (F. HALBHERR, *Rend. Acc. Lincei*, 1902, pp. 433-447.)

DELOS. — The Last Campaign of Excavation. — In the *Revue des Etudes Anciennes*, IV, 1902, pp. 303-305, F. DURRBACH gives a very brief summary of the excavations at Delos, in which he investigated especially the portico or agora which he calls the Tetragon, a space about 40 × 50 m. in area, bounded on three sides by colonnades, on the fourth by the wall of the "small portico." Among inscriptions discovered one of the most interesting gives a list of the twenty-three *πομπόστολοι* appointed by the priest of Zeus Polieus. A more detailed account is to appear in *B.C.H.*

DIMINI.—**A Tomb and a Prehistoric Settlement.**—At Dimini, near Volo, Staes has excavated a Mycenaean beehive tomb, which had, however, been previously plundered, and therefore yielded only a few small objects. On a hill above the tomb was a prehistoric settlement in which were found flint knives and fragments of vases with geometric decoration, belonging to a local Thessalian species hitherto unknown. Other points in the neighborhood were investigated. (B. STAES, *Πρακτικά*, 1901, pp. 37-40. Cf. *Athen. Mitth.* XXVI, 1901, p. 237.)

EPIDAUROS.—**The Gymnasium.**—In the *Πρακτικά*, 1901, pp. 49-51 (2 pls.), P. KAVVADIAS publishes plans and a reconstruction of the gymnasium at Epidaurus. The upper walls were of crude brick, the lower parts of stone. The building was erected in Hellenic times. Later it became ruinous and the propylaea was changed into the temple of Hygieia, while an odeum was built in the large court.

ERETRIA.—**Tombs and their Contents.**—In *Athen. Mitth.* XXVI, 1901, pp. 333-376 (5 pls.; 12 cuts), K. G. VOLLMÖELLER describes in great detail two chamber tombs, containing funeral beds, near Eretria. The first, in a tumulus on the road to Chalcis, was opened by peasants in 1897, and a considerable part of the contents is now in the Boston Museum of Fine Arts. At the top of the tumulus later investigation brought to light a core of crude brick surrounded by a wall, which seems to have been the foundation of a monument. The walls of the chamber were covered with a very fine stucco, on which were paintings of garlands and small objects, represented as hanging from two rows of bronze nails. Within were two couches and three "thronoi" of rather coarse marble. All were made in two blocks, of which the upper served as a cover to the lower, which was hollow and contained the funeral urns. The decoration of the furniture shows the characteristic volutes which appear in the early Ionian art and continue through four centuries. The inscriptions showed that the tomb was used for three generations, and that the couches contained the ashes of men, the "thronoi" of women. Among the objects found in the tomb were terracotta Erotes, clay shields highly colored and bearing decorations in relief, and a number of gold ornaments, among them the ring in Furtwängler, *Griech. Gemmen*, pl. lxvi, 4. The other tomb, to the east of Eretria near Vathia, was also plundered by its discoverers, and no trace of its contents has yet been found. It contains two couches of poros, in which the forms of the cushions and coverings are carefully reproduced and highly colored in the same brilliant stripes which are found in the modern Greek blankets. The legs represent turned wood plated with bronze, of a type which is common in Assyrian and Persian monuments, but does not appear in Greek art before the Macedonian period. For a full discussion of this whole class of monuments, the author refers to his dissertation, *Griechische Kammerngräber mit Totenbetten*, Bonn, 1901.

MEGALOPOLIS.—**A Mosaic.**—In Megalopolis, in a ruined building believed to be a gymnasium, there has been found a large mosaic, in one corner of which is a representation of the goddess Megalopolis, wearing on her head a crown with three turrets and holding a cornucopia filled with fruit. On the rest of the mosaic are birds and animals. Other ruins were partially investigated. (M. A. KAVALIERATOS, *Πρακτικά*, 1901, pp. 45-48; cf. *Athen. Mitth.* XXVI, 1901, pp. 236-237.)

MYCENAE. — A Polychromatic Head. — In 'Εφ 'Αρχ. 1902, pp. 1-10 (2 pls.: 1 fig.), CHR. TSOUNTAS publishes a head found at Mycenae in 1896. It is somewhat under life size. The material is stucco. Color is freely used, the hair, the eyebrows, and outlines of the eyes being black, the lips, a band about the forehead, the lines marking the inner part of the ear, and four ornaments on the cheeks, forehead, and chin being red, and the diadem worn on the head blue with lines of black. A necklace consisted of alternate red and blue beads. The diadem and band are identified with the Homeric *ἄμυνξ* and *ἀναδόσμη* respectively. The ornaments on the face show that tattooing or painting the face was or had been in vogue when the head was made. That such a custom existed before and after the Mycenaean times was already known. The head was originally part of a statue, probably of a sphinx. In style it is rude, but fresh, not a product of conventional rules. In some respects a small lead image from Κάμπος is its nearest analogy.

Work in 1901. — In 1901 the removal of the earth thrown out in early excavations was continued. The discoveries made were of little interest. Among the most interesting are an engraved gem and a gold chain. (CHR. TSOUNTAS, *Πρακτικά*, 1901, p. 42.)

MT. PARNES. — The Cave of Pan. — In the cave of Pan on Mt. Parnes a number of vases and other small objects have been found imbedded in thick deposits of lime. Worthy of special mention is a gold ring containing a stone, on which a bee is engraved. (A. N. SKIAS, *Πρακτικά*, 1901, pp. 32-33; cf. *Athen. Mitth.* XXVI, 1901, p. 236.)

SESKLO. — A Prehistoric Acropolis. — At Sesklo, between Volo and Velesino, about one-third of a prehistoric acropolis was excavated in 1901. It belongs, like that at Dimini, to a pre-Mycenaean period. Objects found were pottery, stone and bone arms and utensils, primitive marble and clay idols, two clay seals, a gold ornament, and remains of food. (CHR. TSOUNTAS, *Πρακτικά*, 1901, pp. 41-42.)

TENOS. — Temple of Poseidon and Amphitrite. — The French School has discovered the temple of Poseidon and Amphitrite on the island of Tenos. The foundations, about 100 m. from the sea, are 16 m. long by 12 m. broad. On the east and west ends are many steps leading to the temple. The excavations have yielded many fragments of sculptures, chiefly sea-monsters, and inscriptions. The sacred enclosure evidently covered a large area and contained many buildings, including a bath and rooms for the accommodation of visitors. (*B. Berl. Phil.* W. December 27, 1902.)

THERA. — Further Excavations and Discoveries. — In June, 1902, Hiller von Gaertringen returned to Thera to complete the excavations on that island. Some important inscriptions were found, including a fragment of a law of the fourth century B.C., and a decree of the Bacchistae in honor of the Egyptian commander, which gives valuable information as to the organization of the Egyptian garrison in the second century B.C. Especial attention was given to the plans of the private houses, and though but little of architectural value was gained, much light was thrown on the history of the city. Many archaic rock inscriptions were found on almost inaccessible cliffs, where they seem to have been carved by climbers anxious to leave proofs of their skill. Excavations in the southern necropolis yielded a large number of well-preserved geometric vases and gold ornaments of the eighth

and seventh centuries B.C. A museum with rooms for the sculptures, inscriptions, and vases has been built, and was formally opened on June 22. (F. v. H., *Athen. Mith.* XXVI, 1901, pp. 422-427.)

THERMUS.—**The Greek Excavations.**—The excavations by the Greeks at Thermus are briefly described by G. SOTERIADES in *Records of the Past*, I, 1902, pp. 173-181 (10 figs.). The article is interesting, but contains no new information. In the *Πρακτικά*, 1901, pp. 34-37, SOTERIADES reports on his work in 1902. No striking discoveries were made, but the ground near the temple was cleared. Many coins and tiles were found. A bronze weight with the inscription 'Απόλλωνος Μ Θερμίου came to light. Μ indicates that it was a *mina*. Its weight is 500 grammes. Some decrees of proxeny were found inserted in a late wall. Two are dated in the first generalship of Scopas, i.e. 220-219 B.C. or earlier. Another inscription, found in excavating before the long stoa, reads Δίουπιος ἐπόνησε. Near Chrysovitza, in the valley of Valtza, is an ancient fountain near which many broken terra-cottas and some bronze utensils were found.

THESSALY.—**Votive Reliefs.**—In *Hermes*, XXXVII, 1902, pp. 627-630 (3 figs.), OTTO KERN describes a votive relief to Heracles, found at Pagasae, and publishes a votive relief to Heracles, a relief dedicated to a hero (ἥρως) and a relief representing a winged thunderbolt, all from Argalasti. Heracles is represented with a club in his right hand and a mantle (or hide) on his left shoulder. On the relief dedicated to a hero is a youth fondling the muzzle of a stag. The youth may be a hero like the Attic Κένυρος or the κενυγέραι of the Piraeus.

VARIOUS MINOR DISCOVERIES.—On **Andros** a grave has been discovered in which were two small statuettes on bases, and a lead sarcophagus containing vases and small toilet articles.

Near **Hysiae** (Achladokampos) a grave has been found covered with two stone slabs, on one of which is carved in low relief Asclepius, Hygieia (?), and Telesphorus (?).

During the works on the harbor at **New Phalerum** a number of grave monuments have been found, some with inscriptions, but none of special importance. They have been placed in the Piraeus museum, along with two others found in an excavation in a court of a private house.

At **Velestino** near Phrae, ancient graves have been found, on one of which was an inscribed stele. (*Athen. Mith.* XXVI, 1901, pp. 235-237.)

ITALY

AQUAE ALBULAE.—**Discoveries.**—In *Athen.* August 9, 1902, R. LANCIANI states that at the ancient Aquae Albulae, seventeen miles out on the Via Tiburtina, various ancient remains have been found. Among them are several herms, one of which represents a young woman (Sappho?), while another, headless, is inscribed Θέσπης Θέμωρος Ἀθηναῖος. A marble bracket found here has a metrical inscription describing how some one had regained his health at the baths and offered the nymphs a gilt statuette. The ruins at this place have long, in fact always, been known. (Cf. BORSARI, *Not. Scavi*, 1902, pp. 111-113.)

ATRI AND ELSEWHERE.—**Prehistoric Tombs.**—In *Not. Scavi*, 1902, pp. 229-266 (45 figs.), E. BRIZIO describes objects found in tombs recently opened at Atri and other places in the same region. The account

of excavations at Atri, in the locality called *la Pretara*, was begun in *Not. Scavi*, March, 1901, pp. 190 ff. Three groups of tombs have been found, some covered with a stone slab, others uncovered. The ordinary objects of bronze and iron were found in great abundance, — necklaces, brackets, rings, *fibulae*, *châtelines*, spear-heads, arrow-heads, and swords. All are minutely described. These vases were of poor quality, except one of fine *bucchero*. A distinguishing characteristic of the vases is the large number of handles; there are ordinarily four, and one has as many as eight. No vases of metal were found. Only one long sword was found; the others were daggers rather than swords. There was no defensive armor. The necropolis is thought to be as late as the fifth century B.C. — In 1900 another necropolis was partially explored 3 km. south of Atri at Colle della Giustizia. Here the most significant discovery was a copper basin. The necropolis is thought to be at least as early as the sixth century. — At Penne several tombs have been discovered, the first about twenty years ago, others in 1901. The most noteworthy objects are a female head in high relief, in bone; and a small bronze fibula of the *La Tène* type; no example of this has been hitherto found so far south. — At Bisenti, 6 km. from Bacucco, was found a bronze arrow-head of the kind found in the *terremare*. — Various objects of all periods have come to light at Castiglione Messer Raimondo. None are worthy of special note except two terra-cotta antefixes representing Artemis. — Discoveries at Appignano indicate that there was in that place a necropolis dating from the same period as that of the necropolis of Petrarà near Atri. — The accidental discovery of a tomb at S. Giovanni on the river Mavone, 7 km. from Basciano, led to excavation there in 1901, but nothing was found. — At S. Maria, 3 km. from the place last mentioned, a single large tomb was opened, containing a great number and variety of objects. Most noteworthy are the half of an iron wagon-tire, a mass of iron like two others found at Atri, which had served as the head of a club, a candelabrum, and vases of terra-cotta and of copper. The tomb is of the sixth century B.C.

CAMPOMICCIOLO. — An Ancient Aqueduct. — In *Not. Scavi*, 1902, p. 131, N. PESICCHETTI reports the discovery of an ancient aqueduct and a terra-cotta mask, representing a Triton, at Campomicciolo, in the territory of Papigno, in Umbria.

CERTALDO. — Arretine Vases. — In *Not. Scavi*, 1902, pp. 83-84, E. GABRICI gives a list of twenty-one Arretine vases recently found at Certaldo, nearly all of which have the maker's mark.

FERENTO. — Intact Tombs. — The necropolis of Ferento, north of Viterbo, has been recently explored, and among hundreds of tombs opened in antiquity or in more recent times, four, hitherto untouched, have been discovered. Of the contents the most noteworthy objects were two large black-figured amphorae, a sacrificial knife, and several *bucchero* vases, one of which shows traces of a silver coating. In *Not. Scavi*, 1902, pp. 84-94 (3 figs.), A. PASQUI describes the tombs and their contents, treats briefly the early history of Ferento in the Etruscan and Roman periods, and discusses the possible methods of coating *bucchero* vases with silver.

FLORENCE. — The François Vase. — In *Atene e Roma*, October, 1902, LUIGI A. MILANI writes of the restoration of the François vase, which was broken into 638 pieces (not counting some small portions which were actu-

ally pulverized) by one of the attendants in the museum, September 9, 1900. It has been possible to restore the vase so that almost nothing is lost. The most important gap is caused by the lack of a piece which was picked up and carried off by a visitor at the time of the disaster. It represents one of the attendants of Theseus holding a maiden by the wrist, and below, in another row, the head of a Lapith. In the course of the restoration the pieces were carefully cleaned, and some hitherto unobserved details became evident, among them two lances in the hand of Troilus. On the whole the condition of the vase is better than before the disaster. Reichhold's recent publication of the vase is discussed and praised. (Cf. GEORG KARO, *Berl. Phil. W.* December 27, 1902.)

GIOIA TAURO.—**Various Discoveries.**—At Gioia Tauro, the ancient Metaurum, hundreds of iron spear heads have been found, of all shapes and sizes; also many archaic architectural fragments of terra-cotta, from an early temple. Other discoveries made in this region from time to time are noted by P. Onsi in *Not. Scavi*, 1902, pp. 126-130 (plan; 3 figs.).

GROTTAFERRATA.—**Early Tombs.**—In *Not. Scavi*, 1902, pp. 135-198 (112 figs.), G. A. COLINI and R. MENGARELLI describe in detail several early tombs found at Grottaferrata, near Frascati. The tombs consisted of shafts, at the bottom of which were large vessels (*doliæ*) containing ossuary urns together with various vases, fibulae, and a few other objects. Some of the vases were ornamented with linear patterns. Several ossuaries have the shape of huts. These were not contained in *doliæ*. These tombs confirm what was already known of the early civilization of Latium.

NAPLES.—**The Greek Wall and Other Remains.**—In *Not. Scavi*, 1902, pp. 288-311 (4 figs.), E. GABRICI gives a detailed report of the discovery of ancient remains at Naples in 1898-1899, in the course of the work for the general improvement of the city. Many ancient house walls were found and several mosaic floors; also a reservoir of Roman construction and other remains of Roman baths, and the sculptured front of a Christian sarcophagus. But the most important discovery was that of several sections of the ancient wall of the Greek city. It is formed of tufa blocks, of various dimensions, laid without cement, and marked with Greek letters. The article concludes with a discussion of the extent of the original town as indicated by the line of wall, and the position of subsequent additions.

NESAZIO.—**Four Periods of Occupation.**—Excavations at Nesazio (Istria) have given evidence of four periods,—Mycenaean, pre-Roman, Roman, and late Roman. The exploration of the pre-Roman necropolis has brought to light vases and bronze objects in great abundance. (L. PIGORINI, *B. Paletn. It.* 1902, pp. 141-142.)

POMPEII.—**Excavations, October, 1901, to July, 1902.**—In October and November, 1901, excavations were carried on in Reg. V, Ins. III. Two houses, opening upon the street between Reg. III and Reg. IV, Nos. 9 and 10, were investigated. No. 10 is the larger and richer of the two, but no objects of great interest were found. (R. PARIBENI, *Not. Scavi*, 1902, pp. 201-204; 1 pl.) In *Not. Scavi*, 1902, pp. 204-206, G. GATTI publishes a number of *graffiti*, for the most part illegible, from the house No. 10. In December, 1901, excavations in Reg. V, Ins. III, were continued. (E. GABRICI, *ibid.* pp. 206-207.) Further excavations in the same *insula*, carried on in January, February, and March, 1902, are described by R. PARIBENI, *ibid.*

pp. 207-213. Several houses were investigated, but there were no striking discoveries. Twenty-four *graffiti* are published, among them several with the name of *Molestus*. In March the excavations extended into Reg. V, Ins. IV. Here a statuette of a bearded and crowned Hercules was found.

In April, 1902, the excavation of Reg. V, Ins. III, No. 11, was almost completed. The house is small and offered nothing of importance. On the sidewalk before No. 10 an inscription has been brought to light. — HAVETIS INTRO. (R. PARIBENI, *ibid.* pp. 274-276.)

In July, 1902, excavations were carried on at two points,—in the small street between Ins. III and Ins. IV of Reg. V, and near the Barbatelli estate. On the external walls of the houses in the former locality, many painted inscriptions and *graffiti* were found. (R. PARIBENI, *ibid.* pp. 399-401.)

POZZUOLI. — A Sepulchral Chamber and a Statue. — In *Not. Scavi*, 1902, fasc. 2, pp. 57-64 (5 figs.), P. P. FARINELLI reports the discovery at Pozzuoli of a sepulchral chamber, containing a marble statue of a woman, 1.8 m. in height. The chamber is nearly square, with a semi-circular projection on one side: near the centre and below the floor are two tombs, both of which contained skeletons, and one a variety of small objects, of which the most notable is one of tortoise shell, which is either a fan or a mirror. The statue is of the first half of the second century, and represents a woman well along in years. *Ibid.* pp. 64-66 (fig.). E. GABRICI discusses the restoration of this statue, which is, however, in an almost complete condition, and decides that it represents a woman in the act of offering sacrifice on an altar in the form of a candelabrum. (See *Am. J. Arch.* 1902, p. 364.)

A Sarcophagus and Inscriptions. — A sculptured sarcophagus of the third century B.C., bearing a sepulchral inscription, has been found at Pozzuoli. Two other sepulchral inscriptions have been recently found in the same locality. (G. PELLEGRINI, *Not. Scavi*, 1902, pp. 398-399.)

ROME. — The Prehistoric Tomb in the Forum. — In *Not. Scavi*, 1902, pp. 96-111 (18 figs.), G. BONI describes the prehistoric tomb in the Roman Forum at the south corner of the temple of Antoninus and Faustina. The *dolium* rested in a trench or well, which was covered with a slab of tufa. Inside the *dolium* were an *olla* nearly full of cremated bones, and eight other vases. The cover of the *olla* is like that of a hut, showing the rafters. All of the vases are of coarse, reddish terra-cotta, and are made by hand. The tomb probably belonged to a necropolis, of which no other traces have been yet discovered. (See also LANCIANI, *Athen.* August 9, 1902.)

The Domus Valeriorum. — The site of the palace of the Valerii Poplicolae, where remarkable discoveries were made in 1554, 1561, and 1711, has been bought by the executors of the late Count Cerasi for the site of a convalescents' home. In digging for the foundations, the atrium of the ancient palace was rediscovered. A column nine feet high, found near its base, shows that the columns of the peristyle were Ionic. Three herms were found in the court surrounded by the peristyle. A pedestal bears an inscription stating that the statue it once supported was dedicated by the Corporation of Marravium in the Marsican district (*Ordo Marsorum Marr. honorem statuarum decrevit*). A fragment of the *Fasti Consulares Minores* gives the names of the Consules Ordinarii and Suffecti for the years 3-6 A.D. (R. LANCIANI, *Athen.* October 24, 1902; cf. G. PINZA, *Not. Scavi*, 1902, pp. 284 ff.)

A Greek Relief.—The Museum of the Vatican has been enriched by the addition of a Greek bas-relief of the fifth century B.C. representing an athlete with his servant who offers him a strigil and oil. The lower part of the relief and almost the entire figure of the servant are wanting. The relief was discovered in the work of restoration at the church of San Lorenzo de Piscibus. Until the sixteenth century it was intact, as is seen in the drawing of Pierre Jacques. It was then in the collection of Cardinal Cesi. (*Chron. d. Arts*, 1902, p. 231; cf. *Berl. Phil. W.* June 21, 1902.)

Various Discoveries.—The following discoveries are reported from Rome. In the Via della Consulta, architectural fragments and vases. In the Via della Lungara, a travertine slab containing a sepulchral inscription. On the Via Appia, near the church of Saint Sebastian, four tombs, one above another. On the Via Salaria, near the new church of the Carmelitani Scalzi, two tomb chambers belonging to the ancient necropolis. Many sepulchral inscriptions were found here. (G. GATTI, *Not. Scavi*, 1902, pp. 52-56; R. LANCIANI, *Athen.* September 6, 1902.) Near the Via di Saint Stefano Rotondo, ancient pavement, brick walls, and architectural fragments. At the corner of the Via Veneto and the Via Aemilia, lead pipe marked with inscriptions containing the name of Vespasian. At the corner of the Via Boncompagni and the Via Quintino Sella, a gallery, with walls of *opus reticulatum*. In the Piazza dei Cerchi, a *cryptoporticus*. (G. GATTI, *Not. Scavi*, 1902, pp. 94-96.) On the Via Labicana, a marble *cippus*, with a votive inscription, now placed in the Museo delle Terme. (L. BORSARI, *ibid.* pp. 111-113; fig. This article contains also a report from Aquae Albulae.) Minor discoveries made in the various parts of the city are remains of walls and houses, some fragments of marble sculptures and architecture, and some fragmentary inscriptions. (G. GATTI, *ibid.* 1902, pp. 132-134.) Between Saint Stefano Rotondo and the ancient Villa Fonseca, walls and pavements of various periods have been found, belonging to the *Casa Celimontana dei Valerii*. There were also fragments of ancient sculpture and of architectural decoration, four inscriptions, and brick stamps of the second half of the second century. Between Via delle Muratte and Via Marco Minghetti have been found brick walls of various periods, ancient pavement, and a torso of the young Hercules. Other sections of water pipes inscribed with the name of Vespasian have come to light in Via Veneto. (G. GATTI, *ibid.* pp. 267-270.) In the Villa Brancaccio, between Via Merulana and Via delle Sette Sale, remains of the very ancient necropolis of the Esquiline have come to light. Two tombs have been opened: one, a round hole containing a large vase in which were the bones of a child; the other, a rectangular opening, the shape of which was ascertained with difficulty, showing only traces of the skeleton. In the latter tomb were several vases,—hand-made, badly baked, and of a dark color; also a bronze fibula. (GIOVANNI PINZA, *ibid.* pp. 284-287.) Near Via Venti Settembre No. 53 a fine marble statue of a woman has been found. (*ibid.*) In *Athen.* October 25, 1902, R. LANCIANI describes two prehistoric graves found near the Forum, belonging to the Palatine necropolis, and also the graves in the Villa Brancaccio, comparing them with the other graves found near Colonna, Grotta Ferrata, and Frascati.

The step of the altar in the church of Saint Prassede has been found to be the front of a sarcophagus. The stone was used in the fifth or sixth cen-

tury for the sepulchral inscription of an officer of the imperial guard, the *scutarii*. Sepulchral inscriptions have been found on Via Flaminia in the grounds of the Farnesina; a votive inscription in honor of Apollo, in the grounds of the Policlinico; and a new brick stamp between Via del Tritone and Via della Scrofa. (G. GATTI, *Not. Scavi*, 1902, pp. 395-397; fig.)

SARDINIA. — Excavations at Nora. — In *Not. Scavi*, 1902, pp. 71-82 (12 figs.), G. PATRONI describes the excavations at **Nora** in July, 1901, of which a preliminary report was published in *Not. Scavi*, August 1902, p. 381 (see *Am. J. Arch.*, 1902, p. 80). Of the vase fragments, the most ancient represent the Phoenician settlement which was succeeded by the Carthaginian colony. The commerce which was carried on with Campania during the Carthaginian period is indicated by numerous fragments of Campanian vases, all black and without decoration. The foundation of a smelting furnace of the Carthaginian period was found; also an interesting Phoenician capital with the decoration in stucco. Evidences of a pre-Phoenician population were discovered. The most notable discovery was that of a foundation hitherto regarded as belonging to the megalithic period, but now identified as the temple of the first Phoenician colony. A pyramidal stone, the form in which the goddess Tanit was worshipped, gives reason for the belief that the temple was dedicated to that divinity.

SEGNI. — A Bronze Statuette. — In *Not. Scavi*, 1902, pp. 198-200 (2 figs.), A. PASQUI publishes a rude bronze statuette in the *Museo Nazionale* at Rome, said to have been found at Segni. It represents a nude youth wearing a conical cap. The hair falls in a thick mass down the back, and two locks fall forward over the shoulders. The arms hang straight downward. The feet are missing. The similarity of this rude figure to Etruscan work shows that Etruscan civilization extended to this region.

SICILY. — FERLA. — Christian Catacomb. — At Ferla, in eastern Sicily, JOSEPH FÜHRER has investigated a striking burial-place of the fifth or sixth century after Christ, the most interesting element of which consists in a group of "canopied" tombs, one of which has the inscription, *Διονύσιος πρὸς βυτερύσας* (sic) *ἐκκλησίᾳ τῇ Ἐργιτάνῃ ἐτῇ λδ' τὸν ἐώνιον* (sic) *ἔπνον ἐνθάδε κοιμᾶτε* (sic). The phraseology points, so FÜHRER thinks, to a developed church organization and a settled pastorate. The entire complex of tombs at Ferla is described, and the author promises the publication of a large amount of material from his extensive Sicilian studies, if means are forthcoming. (*Röm. Myth.* XVII, 1902, pp. 110-121; 1 plan; 1 cut.)

SICILY. — GRAMMICHELE. — A Cave Sacred to Demeter. — In *Not. Scavi*, 1902, pp. 223-228 (5 figs.), P. ORSI describes a cave found near Grammichele in the mountainous region between Licodia, Mineo, and Caltagirone, in Sicily. Here were found many fragmentary terra-cotta figurines and reliefs representing a female deity with a *polos* on her head. This is doubtless Demeter. The style of the terra-cottas belongs to the fifth and fourth centuries B.C.

SICILY. — LICODIA EUBEA. — Sepulchres of the Latest Period. — In *Not. Scavi*, 1902, pp. 219-223 (4 figs.), P. ORSI describes four rock-cut tombs at Licodia Eubea belonging to the last (fourth) period of Siculan civilization. In one of these was a slab of stone with a rude relief representing an urn, with spirals shaped like the letter S beside it. The forms

are Greek, and an illegible retrograde inscription is in Greek letters. Other objects found show that at this period (sixth and fifth centuries) Siculan civilization was strongly influenced by Greek culture.

SICILY. — MOLINELLO. — Sichel and Christian Tombs. — In *Not. Scavi*, 1902, pp. 411-434 (plan; 23 figs.), P. Orsi describes the Sichel tombs and Christian catacombs of Molinello near Augusta in Sicily. The site was evidently inhabited from the eleventh or tenth century B.C. to the beginning of the fifth century after Christ; and there are traces of later Byzantine occupation. In January, 1902, several Sichel tombs were opened, containing many vases. Most interesting is a small Mycenaean amphora of the style of the eleventh or tenth century B.C. The poverty of the Christian catacombs illustrates the condition of the early religious communities in Sicily. There were here originally two independent cemeteries, dating from the end of the third century; these after the time of Constantine were connected and enlarged. The catacombs were abandoned about the beginning of the fifth century. The centre of the whole cemetery is a large chamber, having in the centre a *tegurium*; this was evidently the tomb of a martyr or of some other person distinguished for virtues or rank. The catacombs offered no remains of painting or sculpture and only a few inscriptions.

SICILY. — RAGUSA. — Aes Grave. — At Ragusa, in Sicily, two specimens of *aes grave* have been found. They are of the same type. — Obv. head of Hercules with the lion's skin to left; Rev. prow of a ship to left, — but of different weights (41.6 and 27.6 gr.). These, with the one from Vizzini, are the first specimens of Roman *aes grave* found in Sicily. They may have been brought by Roman soldiers in the Second Punic War. (P. Orsi, *Not. Scavi*, 1902, pp. 218-219.)

SICILY. — TERMINI IMERESE. — Walls and Tombs. — At Termini Imerese, in Sicily, outside of the Porta Palermo, walls of *opus reticulatum* have been found belonging to tombs of Roman date. Other tombs were covered with sloping slabs. A skeleton, a large glass vase, and a few small glass vases were found in the tombs. (S. CIOFALO, *Not. Scavi*, 1902, p. 228.)

SICILY. — VIZZINI. — Tombs and their Contents. — In and near Vizzini, Sicily, tombs have been discovered. Among the objects found in them the most noteworthy are a mirror-handle, upon which is a relief of a seated woman resembling the so-called Penelope, and a specimen of *aes grave*. The mirror-handle belongs to the close of the fourth or the beginning of the third century B.C. The specimen of *aes grave* may have been brought from Italy about the same time. (P. Orsi, *Not. Scavi*, 1902, pp. 213-218; 1 fig.)

SICILY. — Various Discoveries. — In Syracuse, on the southern slope of Aehradina, a Roman house of the beginning of the empire has been discovered. Two rooms connected by a *cryptoporticus* have been excavated, one completely, the other only in part. The latter belonged to the inhabited portion of the house; its walls are plastered, and painted in the Pompeian style; the floor is of *opus signinum*. The walls of this room and of the *cryptoporticus* are of stone. The other room was excavated from the natural rock, and, though modestly decorated, probably served as a store-room. Further excavations in the necropolis of the *Grotticelli* prove that it was in use from the fourth century B.C. to the eighth century after Christ. Recent explorations in the necropolis of *Gela* have brought to light many

tombs containing a large number of vases. The mosaic floor and decorated walls of a room belonging to a fine Roman dwelling-house have been discovered at **Centuripe**. (P. Orsi, *Not. Scavi*, 1902, pp. 402-411; 3 figs.)

The necropolis of **Cava Cana Barbara**, near Syracuse, was excavated in May, 1899. It is of the transition between the first and second periods. The contents of the tombs are described by P. Orsi in *B. Paletn. It.* 1902, pp. 184-190 (1 pl.; 5 figs.). At **Valsavoja** (Leontini) a necropolis was partially excavated in April, 1899. The objects found were chiefly of the first period, but the second and third periods were also represented. (P. Orsi, *ibid.*, pp. 103-119; 2 pls.; 5 figs.)

TARANTO. — Ancient Vases. — In the museum at Taranto is a group of vases from three tombs discovered at Pisticci in 1898. They include red-figured vases of Greek manufacture of the fourth century B.C., and geometric vases of local manufacture, which must be assigned to the same period. The most interesting of the Greek vases is a *κελεύθην*, with a picture of Dionysus on a mule, accompanied by a Silenus and a Maenad; there are two *craterae* with Bacchic scenes, and a *hydria*, with a picture of Peleus pursuing Thetis. (Q. QUAGLIATI, *Not. Scavi*, 1902, pp. 312-319; 8 figs.)

TORRE-ANNUNZIATA. — A Bronze Heracles. — A bronze statue representing Heracles in repose, seated on a stone, with a shield resting on his shoulder, has been found at Torre-Annunziata, near Pompeii. It is ascribed to the period of Lysippus and recalls the Farnese Hercules. (*Chron. d. Arts*, 1902, p. 215.)

TURIN. — The Ancient City. — At Turin, in the course of the work on the drainage system, remains of the ancient Augusta Taurinorum have appeared at many points. The east side of the town wall was encountered in Via Finanze, near the Teatro Carignano; the south side in Piazza S. Carlo, near the end of Via Roma; the north side in Piazza Milano. The foundation of many of the towers has been found. Well-paved ancient streets have come to light at all points; they are from 10 to 12 m. wide, and have a raised sidewalk. The ancient drainage system was a remarkable piece of work, and is well preserved. Sides and vault of the channel were of stone; in most cases the alluvial sand served as a bottom; in some there was an artificial bottom of large bricks, sometimes resting on a stone foundation. (A. D'ANDRADE, *Not. Scavi*, 1902, pp. 277-280.)

VARIOUS MINOR DISCOVERIES. — In *Not. Scavi*, 1902, various discoveries are reported by different writers. At **Piobesi**, near Turin, various small objects of Roman period, including a new brick stamp and a fragment of a milestone, have been found (pp. 49-52). At **Cava dei Tirreni** four tombs of the second century have been discovered, containing vase fragments, lamps, etc. (pp. 66-67). Three sepulchral inscriptions have been found at **Larino**. Several early vases have recently been found at **Grottaferrata** and **Colonna**; also a flint arrow-head, colored red; the only other example of such coloring is from the tomb of Sgurgola, of the eneolithic period. (L. SAVIGNONI, pp. 114-117; 6 figs.) Discoveries that have been made from time to time at **Fossa** include tombs, walls, street pavement, and an inscription of the ancient Aveia (pp. 67-68).

At **Tivoli** the room has been cleared in which were found in 1883 the tables published in *C.I.L.* XIV, 3687, 3688. Two rectangular inscribed bases have been found, which held statues of M. Lartidius and Varena

Maiores, patrons of Diphilus, the freedman who set up the tables. There were found also architectural fragments of the sanctuary of Hercules Victor, among them an elaborately carved pilaster, with a figure of Hercules in low relief, clothed in a long tunic. No other representation shows the god completely covered. This is probably the type of the *Hercules Tiburtinus*. At **Palestrina** three large fragments of an epistyle have been found, containing a dedicatory inscription of the end of the republican period. At **Terracina** a dedicatory inscription on a large block of limestone has come to light. (L. BORSARI, pp. 117-121; fig.) At **S. Vittorino** have been found lead water pipes of the ancient Amiternum, one of them inscribed. At **Civitatomassa**, on the site of the ancient Foruli, Roman tombs and sepulchral inscriptions have come to light (pp. 122-123). At **Castelvecchio Subequo**, in the country of the Paeligni, a long inscription has been found, containing the name, offices, and military service of Q. Octavius Sagitta, *dumvir quinquennalis*. At **Vittorito** several tombs have been opened, containing various small objects (pp. 123-125). A room full of Roman *amphorae* has been excavated near **Reggio Emilia**. The vessels are of various shapes and dimensions, and were used for the storage of wine (p. 281). Remains of a Roman fountain have been discovered on the road from **Terni to Rieti**. Noteworthy is a large terra-cotta mask, from which the water flowed (pp. 281-283). A terra-cotta antefix, found north of **Corneto** in the place called **Ortaccio**, has led to an investigation and the discovery of remains of a temple, — blocks of limestone, tiles, and broken antefixes (pp. 393-395; fig.).

In *B. Paletn. It.* 1902, pp. 59-65 (3 figs.), G. CHECCHIA describes various objects of the neolithic period, — axes, knives, scrapers, — found in the province of **Capitanata**. *Ibid.* pp. 190-194. L. FIGORINI records with slight comment the following recent discoveries: a necropolis of the bronze age at **Scarnozzina**, near Milan; a pre-Roman necropolis at **Ancona**; two other archaic tombs in the **Roman Forum**, near the first one, at the corner of the temple of Antoninus; a pre-Roman necropolis at **Scandale**, in the province of Catanzaro.

SPAIN

CABEZA DEL GRIEGO. — **A Columbarium and Other Monuments.** — In the *Revue des Études Anciennes*, IV, 1902, pp. 245-255 (1 pl.; 8 figs.), PELAYO QUINTERO describes recently excavated remains at Cabeza del Griego in the district of Tarancon. A columbarium consisting of eight chambers contained mosaics, an urn, reliefs with funeral scenes, terra-cotta masks, and various other objects. Near the ancient circus various architectural fragments with ornaments in Visigothic style were found. Inscriptions mention the name *Segobriga*. In an appendix (pp. 255-257; cut) P. P(aris) adds remarks, and states that one of the masks has been presented to the Louvre.

FRANCE

ARGENTON. — **A Hoard of Hallstatt Objects.** — In *R. Arch.* XII, 1902, pp. 22-38 (13 figs.), the Abbé H. BREUIL describes a hoard of objects found in 1899 at a place called La Font-des-Cordeliers, near Argenton (Indre). The objects are chiefly metal ornaments, fibulae, etc., with some tools and a few vases. The hoard was apparently the treasure of a metal-

worker or jeweller. The date is between the Bronze Age properly so-called and the well-developed Hallstatt civilization.

ARPAJON.—**A Stele with a Relief representing Mars.**—In *B. M. Soc. Ant. Fr.* 1902, pp. 187-192 (1 pl.), ROGER GRAND describes the Gallo-Roman station at Arpajon (Cantal) and the discoveries of various kinds made there since 1836. Most of the objects found were in deep walled pits, the purpose of which may have been sepulchral. A trachyte stele, now at Maussac, was found there some thirty-five years ago. It represents the god Mars, nude, with helmet, shield, and lance, standing in an aedicula.

BOIS-DES-BOUCHAUDS.—**Various Discoveries.**—In *B. M. Soc. Ant. Fr.* 1902, pp. 192-193 (1 fig.), C. CHAUVET gives a brief summary of discoveries at Bois-des-Bouchauds, probably the *Sermanicomagus* of the *Tabula Peutingeriana*. The discoveries include the theatre (one of the largest known), a pit partly filled with the treasure of a pagan temple, the bottom of a basin covered with a layer of oysters, coins, and fibulae of the first three centuries after Christ, various capitals, statues, columns, and sculptures, among the latter a fragment representing a vessel with an inclined plau for embarkation. No coins later than 270 A.D. have been found here.

BOURG.—**Inscriptions.**—In *B. M. Soc. Ant. Fr.* 1902, pp. 139-143, l'Abbé MARCHAND publishes two epitaphs found in the territory of the Ambarri, one at Briord (Ain), the other at the château de Machuraz (Ain), and a potter's stamp, *G(aius) Atisius Sabinus*, from Bourg.

CABRIÈS.—**Inscriptions.**—In the *Revue des Études Anciennes*, IV, 1902, pp. 234-237, H. DE GÉRIN-RICARD publishes some fragments of a monumental inscription found in 1897 at Cabriès (Bouches-du-Rhône). It seems to have been a dedication. A fragmentary epitaph from near the hamlet of Patelles is published. The inscription *C.I.L.* XII, 182, from a copy by Peirese, is republished and ascribed to this region.

CHAMPVERT.—**A Villa with Mosaics.**—In *B. M. Soc. Ant. Fr.* 1902, pp. 183-186, is a report by GASTON GAUTHIER on a Roman villa discovered at Champvert, not far from Decize (Nièvre), where a mosaic, in the form of a cross, had previously been found. Fragments of another mosaic, representing fish and other marine subjects, have been discovered. This mosaic appears to have decorated a wall. The walls were further decorated with painted stucco.

MARSOULAS.—**Prehistoric Drawings.**—In *C. R. Acad. Insc.* 1902, pp. 478-483, is a description of the prehistoric paintings and drawings in the grotto at Marsoulas, near Salies (Haute-Garonne). The writer, Mr. CARTAILHAC, visited the grotto in 1902. The engraved drawings resemble those which ornament prehistoric objects of bone and ivory. The animals represented are bisons, horned cattle, horses, a wild goat, and perhaps a deer; but no reindeer and no mammoth. Numerous signs are also painted on the walls. These seem to be of the same date as the painted figures, but both seem to be, in part at least, later than the engraved figures. There are now seven or eight grottoes known to contain paintings or drawings of this kind. Those of the grotto at Marsoulas are to be published in *l'Anthropologie*.

MONS.—**A Seated Mercury.**—In *R. Arch.* XII, 1902, p. 317 (1 fig.), S. REINACH gives a cut of a statuette of Mercury, found some years ago near Mons, and published by EM. HUBLARD in the *Annales du cercle archéol.*

logique de Mons, XXX, 1901. Its affinity to the seated bronze Hermes in Naples is evident.

PARIS. — Acquisitions of the Louvre in 1901. — Department of Greek and Roman Antiquities: The marbles, seventy-seven numbers, none of exceptional artistic merit, include parts of statues, heads, religious and funerary reliefs, sarcophagi and inscriptions, which are very largely from Asia Minor, and chiefly the gift of M. Paul Gaudin. A few pieces come from Cyprus, Egypt, Carthage, and elsewhere. The bronzes, thirty numbers, are statuette, vases, handles, etc., from Delphi, Corinth, and other parts of Greece, and from Epirus, an archaic bucranium from Thasos, an infant Harpocrates and a pair of wrestlers from Egypt, a jug and ladle from the Lake of Nemi, and a fifth-century head and an ephebus statuette from the Bourguignon collection at Naples. In glass, there are a dozen bottles and vases from Syria, and a Christian medallion from Italy. Among the miscellaneous articles are a child's mirror of glass, set in lead, from Trebizond, and three Christian mosaics from Africa. (A. HÉRON DE VILLEFOSSE, *E. Michon. Arch. Anz.* 1902, pp. 122-127.)

PUY-DE-DOME. — Excavations in 1901. — In *C. R. Acad. Insc.* 1902, pp. 299-316 (plan), AUGUSTE ANDOLLENT describes excavations conducted in 1901 (July 26-August 22) at Puy-de-Dome on the site of the sanctuary of Mercurius Dumias. Remains of walls, fragments of marble, and other hewn stones, terra-cottas, pottery, objects of lead, copper, and bronze, a gold pin, a silver fibula, and many coins were found. Of the coins a few are Gallic and a few modern, but Roman coins, from Augustus to the Valentinians, predominate. The temple is said, by Gregory of Tours, to have been destroyed under Valerian and Gallienus, but it must have been rebuilt. Signatures found on fragments of pottery are: *Offic(ina) Acuti*, *Off(icina) Calvi*, *L. C(lodii?) Celsi Off(icina)*, *Off(icina) M. Iu(lii?)*, *L. Occ.*, *Macrinu(s)*, *Mar...*, and *Virthus fecit*. Further excavations are briefly mentioned, *ibid.* pp. 471-472. Walls, architectural fragments, coins, fibulae, some pottery, a few fragmentary inscriptions, and fragments of mosaics were found.

REIMS. — Gallo-Roman Vases. — In *B. M. Soc. Ant. Fr.* 1902, pp. 182-183 (pl.), Mr. PILLOY publishes two vases found in 1901 at Reims. They are of red clay, and are adorned with vines stamped in relief. One bears the inscription *vinu(m) misce*, the other *merum da escipe vita*.

SAINT-HILAIRE-SUR-GARONNE. — A Draped Female Statuette. — In *B. M. Soc. Ant. Fr.* 1902, pp. 198-201 (pl.), a draped female statuette, lacking the head, both hands, and both feet, is published. It was found at Saint-Hilaire-sur-Garonne, near Agen, and is described by Mr. LAUZUN, who calls attention to the number of ancient statues found in this region, and suggests that there may have been a school of sculptors there. The height of the statuette in its present condition is 0.56 m. The material is white marble of the Pyrenees. The work appears to be good. The left shoulder and breast are bare; the left hand held the drapery at the hip; the right forearm extends forward.

VENEJEAN (DRÔME). — Inscriptions. — In *B. M. Soc. Ant. Fr.* 1902, pp. 131-132, G. LAFAYE records the discovery at Venejean, northeast from Mont Ventoux, of various remains of a Roman settlement. A clay lamp has the inscription CN ATILI, and a limestone altar is inscribed *Deo | Volcano | sacrum | Valeria | Sextia et | Iccius Cra- | tion ex | iussu*.

VIENNE. — Mosaics. — In *B. M. Soc. Ant. Fr.* 1902, pp. 133-136 (2 pls.), is a communication from Mr. Bizot reporting the discovery of further mosaics at Sainte-Colombe (cf. *Am. J. Arch.* 1902, p. 370). The most important represents Hylas seized by two nymphs. It resembles closely the mosaic found at Baneza (see *Am. J. Arch.* 1902, p. 368), and less closely the mosaic in the palazzo Albani, at Rome. Evidently the Roman mosaicists reproduced stock patterns. *Ibid.* pp. 154-155, Captain ESPÉRANDIEU mentions that one of the mosaics at Sainte-Colombe represents a female head, and a third, two parroquets perched on a vase. He also describes a curious wall made of large amphorae with the mouth downward. Forty-one amphorae have been exhumed, and about twenty of these have stamps, nearly all different.

BELGIUM

BRUSSELS. — A Thracian Relief. — The Musée du Cinquenaire at Brussels has just received from the Belgian traveller, Cuypers, a remarkable Greek-Thracian memorial bas-relief from Thessalonica. The marble slab contains two distinct subjects, divided from each other by a horizontal beam. In the upper half is exhibited a Thracian hunter on horseback, holding a spear in his right hand, and followed by a hound. Opposite to the equestrian figure sits a richly dressed woman. Between these two figures stands an altar, on which a coiled snake is erecting its head, and behind the altar is a tree; the altar, snake, and tree indicate the cultus of the dead. On the lower half of the stone there are three male figures and a young girl. The inscription (which is partly on the upper edge and partly on the lower edge of the reliefs) states that the stone was dedicated by a widow to her deceased husband, and to her father-in-law, Pyros, in the ninety-ninth year of the era of Actium (that is, sixty-fourth after Christ). Pyros is a Thracian name, and Thessalonica contained a large Thracian population until late in the age of the Caesars. The horseman and the sitting female doubtless represent the married couple, but the portion of the inscription, which probably contained their names, has not been preserved. (*Athen.* December 27, 1902.)

GERMANY

DRESDEN. — Acquisitions of the Museum. — Additions to the collection of antiquities in 1899-1901 include four marbles, a helmeted head of Athena, which is an excellent copy of a bronze of severe style; a child's gravestone from Attica; a life-size head of Menander; and a remarkable girl's head, an original of the time and school of Praxiteles, closely resembling the head of one of the muses on the Mantinean basis; an Etruscan bronze statuette of a praying libation-pourer; sixteen terra-cottas, chiefly from Greece, rude seated goddesses with the head cast in a mould, female figures in Doric peplos and with enormous coiffures, a girl holding a swan, perhaps Leda or Nemesis, with drapery of the not uncommon type of the Barberini Hera, and a painted calathus, probably a votive offering, of a type of which several have recently become known; an amphora, a cup and several jugs of geometric style; a bowl pressed when soft in a willow basket; a Samian statuette-vase; an archaic black-figured amphora; a pair of black-figured Attic hydriae with a unique treatment of the neck, a chalk-white

coating on which standing figures are painted in black glaze; a black-figured white lecythus with the figure of a god; other small lecythi, jugs, etc. (G. TREU, *P. HERMANN*, *Arch. Anz.* 1902, pp. 109-117; 12 cuts.)

AUSTRIA-HUNGARY

NORICUM. — **Inscriptions.** — In *Jh. Oesterr. Arch.* I. V, 1902, Beiblatt, coll. 163-180, E. NOWOTNY publishes, with facsimiles, six Norican inscriptions. Two from Virunum are dedications to Fortuna Augusta, and one of these contains three Celtic names. One inscription, in Cilli, mentions the third Spanish auxiliary cohort. Another, in Gonohitz, gives the stages of the career of a decurion in an auxiliary cohort.

TRANSYLVANIA. — **Ancient Monuments.** — In *Jh. Oesterr. Arch.* I. V, 1902, Beiblatt, coll. 93-136 (10 figs.), R. MÜNSTERBERG and J. OEHLEH describe and publish Roman monuments from various places in Transylvania (Siebenbürgen). The monuments are chiefly grave reliefs and inscriptions. Several of the latter seem to be of interest to those who are studying the history of the Roman legions. An interesting though much injured monument at Maros-Németi represents a boatman carved in the round.

SOUTHERN ISTRIA. — **Roman Remains.** — In *Jh. Oesterr. Arch.* I. V, 1902, Beiblatt, coll. 159-166 (2 figs.), A. GNIRS mentions that remains of Roman occupation are visible at seven places on the island of Brione Grande and at Porto St. Nicolo on Brione Minore. At Val Catena, on Brione Grande, the remains of the ancient port are extensive and clearly defined. These are described and illustrated. Remarks on the topography of Pola and descriptions of Roman lamps, fragmentary reliefs, mosaics, and inscriptions complete the article. One relief represents an ithyphallic mule, with the inscription, *Felix*.

ARCHAEOLOGY IN CROATIA. — The *Vjesnik* of the Croatian Archaeological Society of Agram (Zagreb), Vol. VI, 1902 (259 pp.; 109 figs.; 4to), contains numerous illustrated articles in the Croatian language. J. BRUNŠMID describes 'the Antiquities of Colonia Aurelia Cibalae (Vinkovci)'; 'Discoveries of the Bronze Age in Croatia and Slavonia and the Neighboring Lands'; 'Some Discoveries of Coins in Croatia and Slavonia'; and 'Prehistoric Objects from the County of Srijem'; V. CELESTIN publishes brief 'Epigraphic Notes from Mursa'; J. FLORSCHÜTZ contributes an article on 'Stridon and Zrin' with an appendix; F. GRNDRUM describes and publishes in part a Latin manuscript of a Dalmatian monk of the fifteenth century; V. HOFFMILLER discusses the 'Thracian Horseman' and his affinities with various deities, but comes to no positive results; L. IVANČAN writes of the 'Church of All Saints at Stenjevec'; L. JELIĆ describes 'the Antiquities of the City of Nin (Nona)', continuing his previous articles; V. KLAJČ contributes 'Materials for the Mediaeval Topography of the County of Lika-Krbava'; E. LASZOWSKI discusses 'Trg near Ozalj,' and offers 'Some Remarks upon the Church of the Holy Virgin Mary at Zakanje'; and J. PURIĆ describes 'Prehistoric Settlements in the Environs of Erdut.' These articles are mainly of local interest, though some of the fibulae and prehistoric implements published possess an importance not confined to the place of discovery. A bronze statuette of Fortuna, found at Vinkovci, is attractive, though not a great work. No important inscriptions are published.

GREAT BRITAIN

DISCOVERIES IN GREAT BRITAIN IN 1901.—A type of house with small enclosed court, more like the African than the British villa, has been found at **Caerwent**, Monmouthshire. In the Roman camp at **Gelligaer**, the praetorium is found to be quite normal in plan. In **Hadrian's Wall**, the earthen dike which runs behind and parallel to the stone wall appears to deviate from its course in several places in order to take in the site of a castellum. An earth-fortified camp at **Inchtuthill**, north of Perth, is a Roman camp, possibly of Agricola's time, with bathhouse of stone. (F. HAVERFIELD, *Arch. Anz.* 1902, pp. 105-106; 3 cuts.)

BATH.—**Roman Sculpture.**—In *R. Arch.* XLI, 1902, pp. 315-316 (1 fig.), F. HAVERFIELD publishes and describes some fragments of a Roman relief at Bath. The most striking part is a Gorgon's head with thick hair and a beard from which snakes grow out. This is framed in two concentric wreaths, and the whole was held up by two flying Victories. Just outside of the wreaths are a small owl and a helmet of peculiar shape. The Gorgon's head is the most vigorous piece of ancient sculpture found in England. Its inspiration may be Gaulish or Pergamene. The best previous publication is by Lysons, *Reliquiae Britannico-Romanae*, London, 1813.

CASTLECARY.—**An Engraved Crystal.**—The excavations at Castle-cary on the line of the Scottish wall of Antoninus, which have been going on under the auspices of the Society of Antiquaries of Scotland, are now concluded. A report will be presented to the Society shortly, with plans of the station. The latest find is a stone, oval in form, three-quarters of an inch long, by half an inch in breadth, and half an inch in thickness. It is a rock crystal in which is cut a female figure, full length, the upper part of the person nude, with a light drapery passed over one of the arms. In the right hand is a salver containing five apples; in the left an amphora. The head is slightly inclined forward, the eyes being fixed on the apples. One foot is planted on the ground, the other only touches it with the toes, the heel being elevated, indicating motion. (*Athen.* December 13, 1902.)

LONDON.—**Pliny in Germany.**—An interesting inscription has come to light in the British Museum in the course of cleaning a set of silver-plated *phaleræ*, or trappings from a Roman cuirass, which were found in 1854 on the site of the great Roman camp at Xanten on the Lower Rhine with which the name of Drusus is associated. On one of the medallions is a bust of Drusus; on another, under a hard incrustation, the inscription: —**PLINIO PRAEFEC(to).** It is known that the elder Pliny had been a military prefect, and had served much in Germany in the Roman cavalry; but as he was only fifty-six years of age at his death, during the eruption of Vesuvius, 79 A.D., he could not have been connected with Drusus, who fell in Germany 12 B.C. It appears, however, from a letter of the younger Pliny (iii. 5) that among his uncle's literary works was a history of the German wars, "for which he collected the materials while serving in Germany, admonished thereto by a dream in which the ghost (*effigies*) of Drusus, who had perished victoriously in Germany, appeared to him and implored him to preserve his memory from oblivion." It seems reasonable to suppose that the elder Pliny had not only written his history of the German wars, now lost, in obedience to the dream, but had also set up or taken part in erecting

some monument to Drusus in the camp at Xanten. (*Athen.* November 1, 1902.)

LONDON. — Acquisitions of the British Museum in 1901. — Egyptian: The large number of purchases, to a great extent from Upper Egypt, includes collections of stone vases, of flint and obsidian implements, and of pottery, from the neolithic and early archaic periods, 4000 B.C. and earlier; tomb-doors, etc., from the fourth dynasty, before 3600 B.C.; wooden coffins and funeral boats of the twelfth dynasty; a stele, the most important monument known of the thirteenth dynasty; and another, the only monument from the reign of a king of Upper Egypt contemporary with the Hyksos kings; objects from the eighteenth dynasty; blue and green glazed porcelain from the nineteenth dynasty; and so on down through the Ptolemaic, Roman, Gnostic, and Coptic periods to 500 A.D. The gifts are some paleolithic implements, copper vessels and tools, miscellaneous small objects of the first and second dynasties, important for the development of civilization, and some vases with gold covers wired down.

Assyrian: There are over two thousand clay tablets in Sumerian and Old Babylonian, of the second dynasty of Ur and the first of Babylon, 2500–2000 B.C.; inscribed clay cones from southern Babylonia, 2500 B.C.; an Assyrian inscribed bowl of 800 B.C.; clay models and cylinders of 700 B.C.; miscellaneous objects of 650 B.C.; Babylonian commercial tablets of the reign of Cyrus, Cambyses, and Darius the Great; a marble vase with quadrilingual inscription made for Xerxes, 485–465 B.C.; other objects of the Persian period, 400 B.C.

Greek and Roman: A large number of minor objects, gold, silver, engraved gems, bronze statuettes, etc., one marble, an Athenian stele, terracottas, pottery, etc. A collection of small objects of bronze and pottery, fibulae, etc., is from tombs in the Ticino valley, belonging to a primitive stage of civilization there, contemporary with republican Rome.

British and prehistoric: Besides a celt of jade-like stone, a dug-out canoe, and several specimens of Romano-British pottery and bronze found in London and other parts of England, the most important addition, important for comparison with British finds, is the Morel collection of objects illustrating the civilization of northeastern France from the paleolithic to the Carolingian period,—that is, both before and after the separation of Great Britain from the continent,—among them some rare ornamented bronzes of 400–250 B.C., dated by Greek pottery found in the graves with them. Other objects come from southern Russia, Upper Egypt, the valley of the Ticino, etc. (E. WALLIS BUDGE, A. S. MURRAY, C. H. READ, *Arch. Anz.* 1902, pp. 117–122; cf. *Athen.* September 6, 1902.)

OXFORD. — Acquisitions of the Ashmolean Museum in 1901. — A number of extremely interesting objects from the graves of the kings of the first dynasty, fifth millennium B.C., include inscriptions of the names of the kings and queens, textile patterns carved in stone, and a type of painted pottery of well-developed forms resembling pottery of Nagada and that of second dynasty graves. Among later articles from Abydos are some clay figures contemporary with the Hyksos kings, made in Egypt, but by workmen from Greek lands. There are prehistoric remains from graves near Abydos, clay models, vessels, etc., and cylindrical seals with characters resembling those of dynastic times. From a pre-dynastic cemetery north of

Abydos are sickle-shaped flints, and a type of pottery which at Nagada immediately succeeds the neolithic age. There are also objects from the little-known third dynasty, with new forms of red pottery. Somewhat later are specimens of the bud-seals which preceded the scarabs. They resemble certain primitive Cretan seals, and one in particular has characters more like the Cretan than the Egyptian hieroglyphic signs. A pot from the Taurus resembles a bronze-age Cyprian type, but is more primitive. A Hittite gold seal-ring, by far the most important yet discovered, has an elaborate religious scene and a decorative motive related to an Egyptian ornament of the thirteenth and fourteenth centuries B.C. The only new classic Greek possession is the red-figured "armorer" cylix from the Bourguignon collection, a fine Attic work of about 480 B.C. (A. J. EVANS, *Arch. Anz.* 1902, pp. 127-129.)

AFRICA

TUNISIA. — Recent Excavations. — In *R. Arch.* XLI, 1902, pp. 369-408 (6 pls.; 3 figs.), P. GAUCKLER describes the recent excavations in Tunisia conducted by the Direction des Antiquités et Arts. At **Carthage** the "proto-Punic" necropolis of Dermech has furnished much information concerning the early Carthaginian burial customs and the growth of the city; an interesting series of ancient potter's kilns (one of which is almost entirely preserved) has been discovered; the Punic necropolis near the odeum has furnished many interesting objects and has shed light upon the burial customs from the third century B.C. to the fall of Carthage; and the odeum itself has been excavated and made known as an immense structure with semicircular cavea and rectangular stage. Many more or less fragmentary statues have been found. Some of these are works of great merit. At **Dougga** (Thugga) the excavations have laid bare a great part of the ancient town and brought to light many inscriptions, a statue of Caracalla (?), and some mosaics. One of these represents a charioteer (Eros) in his chariot, another four horses with but one head in common. The forum of Thugga is found to have been neither before the capitol nor before the Darel-Acheb. At **Bou-grara** (Gigthi) the forum has furnished many interesting inscriptions and architectural remains. At **Ksar-Tarcine** (Centenarius Tibubuci) a Roman fort has been investigated. In the island of **Djerba** ancient waterworks and Christian monuments have been found. At **El-Djem** (Thysdrus) two reservoirs belonging to the *thermae* have been cleared, some statues and many inscriptions have been discovered. At **Sousse** (Hadrumetum) a black marble statuette and several mosaics, including a rape of Ganymede, have been found. A Roman villa has been discovered at **Mokenine**, Christian mosaics and epitaphs have come to light at **Henchir Msadine** (Furni). Isolated discoveries made at various places are recorded.

CARTHAGE. — Marble Sarcophagi. — In *C. R. Acad. Insc.* 1902, pp. 289-295 (1 fig.), Father DELATTRE describes a marble sarcophagus found in a tomb near St. Monica, at Carthage, May 15, 1902. This is the fourth marble sarcophagus found at Carthage. The lid is decorated with well-formed antifixes, with painted patterns in red and blue, painted garlands, and representations of animals and human beings. The last are indistinct. The drawing is fine and pure. In one pediment the painting represents Seylla. On the top of the lid are marks of what appear to have been baskets

once placed upon it. Similar marks have been found on other sarcophagi. *Ibid.* pp. 443-450 (3 figs.), is a further report by Father DELATTRE on the excavations at the necropolis of St. Monica. A fifth marble sarcophagus, adorned with paintings like those already found, has been discovered. The colors used are red, blue, yellow, and black. The cornices of the gables are adorned with ovules, and the tympana with winged griffins facing each other. On the cover are marks of round objects, probably wreaths, placed there at the time of the burial. A long epitaph of a woman, the descendant of several rabs, was found in the same excavations. *Ibid.* pp. 484-491 (1 fig.), a sixth similar sarcophagus is described. It was ornamented with colored decoration. This sarcophagus was full of resin in which the corpse was preserved. The chamber in which this sarcophagus was found had been full of wooden coffins, which had decayed. The same was true of an adjacent chamber.

KSAR-TARCINE. — The Centenarius of Tibubuci. — In *C. R. Acad. Insc.* 1902, pp. 321-340 (plan), PAUL GAUCKLER describes a fortress of the *Limes Tripolitanus* at Ksar-Tarcine, in southern Tunisia. It consists of a building 15 m. square, surrounded by a wall of irregular heptagonal form. It was not intended to stand a siege, as the only cistern or reservoir is outside of the fortification. It was built in the first years of the fourth century after Christ, when the fort at Tisavar was abandoned, and was voluntarily abandoned about the time of the revolt of Gildo (396 A.D.). An inscription gives its name: *Centenarium Tibubuci, quod Valerius Vibianus, v(ir) p(er)fectissimus, initiari, Aurelius Quintianus, v(ir) p(er)fectissimus, praeses provinciae Tripolitanae, perfici curavit.* The *Limes Tripolitanus*, and probably the province, was apparently constituted by Gallienus about 260 A.D., for the inscription published in *C. R. Acad. Insc.* 1894, p. 472, No. 2, has been found by Renault to bear the name of Gallienus and to be dated between December 10, 263, and March 1, 264 A.D.

MEDJEZ-EL-BAB. — An Inscription. — In *B. M. Soc. Ant. Fr.* 1902, pp. 161-164, P. GAUCKLER publishes the following inscription discovered in the walls of the Byzantine fort at Medjez-el-Bab: *Victoriis Au[gustis] | Imp(eratoris) Caes(aris) M(arci) Claudi Taciti pii felicitis Aug(usti) pont(ificis) max(imi)... | Q(uintus) Numisius Primus aedilic(ius) duumviralic(ius) [aedem? quam or arcum quem]... | ex sestertium XVI mil(ibus) n(unnum) facere promiserat, multi[plicata pecunia...] | Numisii Praetextato et Primo, fili(i)s, et Noniae... | et certamina pugilum edidit quam et....* The date is that of the emperor Tacitus (275-276 A.D.), who seems to have had some special connection with the place.

BYZANTINE, MEDIAEVAL, AND RENAISSANCE ART

GENERAL AND MISCELLANEOUS

DÜSSELDORF. — Retrospective Exposition. — The exposition of religious art at Düsseldorf brought together a large number of works of the goldsmith's art, also wood and ivory carvings and textiles of the Romanesque and Gothic period. An illustrated account of this exposition is given by GASTON MIGON in the *Gaz. B.-A.* 1902, pp. 208-222.

TRENT. — Renaissance Portraits. — The private collections at Trent contain a number of fine portraits which are noticed by LOBOVICO OPER-

ZINER in *Rassegna d'Arte*, 1902, pp. 87-90. Here are published a portrait of a Cardinal by Sebastiano del Piombo, a portrait of Lodovico Madruzzo by G. B. Moroni, a portrait of an Old Man by Hans Baldung Grün, and portraits of a Gentleman and Lady by Van Dyck.

ST. PETERSBURG. — **Discovery of a Painting by Pieter Latsman.** — Mr. BREDIUS, the learned director of the Museum of The Hague, has recently discovered in a private collection of the Count Stetsky at St. Petersburg a painting by Pieter Latsman, the master of Rembrandt. It represents St. Paul and St. Barnabus at Lystra, and was celebrated in its time as a masterpiece. (*Chron. d. Arts*, 1902, p. 238.)

TIMGAD. — **Discovery of a Baptistery.** — A baptistery, adjoining the little Byzantine church discovered in 1901 at Timgad, has been brought to light. It is reached from the basilica by a passageway with three steps, is circular in form, and contained a basin surrounded by a peristyle. (*Chron. d. Arts*, 1902, p. 238.)

ITALY

AREZZO. — **Façade of the Cathedral.** — The Cathedral at Arezzo until the present day was left without a façade, although a design had been made for it by Margaritone, well known as a painter, sculptor, and architect, who died in 1313 A.D. The façade for this Cathedral, in the style of the fourteenth century, is now being erected under the direction of a competent architect from Arezzo, Dante Viviani. (*Rassegna d'Arte*, 1902, pp. 75-76.)

ASCOLI. — **Loss of a Thirteenth-century Pluvial.** — On the 6th of August, 1902, there seems to have been stolen from the chapter house of the Cathedral at Ascoli, a magnificent pluvial, presented by Pope Nicholas IV., on July 28, 1288. Pope Nicholas was born in the vicinity of Ascoli and made many gifts to churches of the neighborhood. The pluvial was elaborately decorated with miniature-like compositions, representing the crucifixion and other subjects. It is reproduced and described in *L'Arte*, 1902, pp. 266-268.

BOLOGNA. — **The Restoration of the Cappella di San Sebastiano.** — The well-known Chapel of San Sebastiano in the Church of St. Petronius at Bologna, which contains important paintings, charming woodwork, and a very interesting pavement, has been recently thoroughly restored. An account of it is published in *Rassegna d'Arte*, 1902, pp. 72-74.

CASTELLAZZO. — **Sculptures from the Tomb of Gaston de Foix.** — In the Villa dei Conti Sormani at Castellazzo are many interesting works of sculpture, among which are several important reliefs from the well-known monument of Gaston de Foix. Other remains from the same monument are in the Castle and the Ambrosian Library of Milan, in the Museum at Turin, in the South Kensington Museum, London, and elsewhere. Those at Castellazzo were transported thither in 1674. A notice of these sculptures is published by LUCA BELTRAMI in *Rassegna d'Arte*, 1904, pp. 132-134.

COMO. — **Paintings by Tiepolo at the Villa Girola.** — The paintings by Tiepolo are not known as a whole, but only in part. The article by HEINRICH MODERN in the *Gaz. B.-A.* XXVII, 1902, pp. 476-488, and XXVIII, pp. 239-241, is a contribution to our knowledge of Tiepolo's work. In this article are published three paintings from the Villa Girola at Lake Como. They represent the Triumph of Amphitrite, Hera and Selene, and Bacchus and Ariadne — or, personifications of water, air, and earth. A fourth

painting, the personification of fire, was probably painted to complete the series. This cycle of paintings is assigned to the period 1738-1740.

FAENZA. — Tomb of Sansovino. — The Tomb of Sansovino in the Cathedral at Faenza is being rearranged by Tomaso Dal Pozzo. This tomb originally was placed in a side chapel and was afterwards transferred to a chapel at the left of the principal altar. The new arrangement, especially of the pilasters which enclose the six reliefs, will certainly produce a more pleasing result. Both the old and new arrangement of this monument are published in *Rassegna d' Arte*, 1902, pp. 129-131.

MASSA. — A Madonna by Pinturicchio. — Cardinal Lorenzo Cibo, 1489-1492, commissioned Pinturicchio to paint a fresco of the Madonna, Saint Lawrence, and other figures for his chapel in S. Maria del Popolo in Rome. This fresco has disappeared from view. A portion of it, that which represents the Madonna, is now to be found in the Cathedral at Massa. It has been recently published by L. STAFFETTI in the *Giornale storico e letterario della Liguria*. (*Rep. f. K.* 1902, pp. 233-234.)

MILAN. — Eight Frescoes by Bramante. — Eight frescoes by Bramante, formerly in the Casa dei Panigarola, have been acquired for the Brera Museum. These frescoes are portraits, three of which were determined by Lomazzo to represent Pietro Suola, Giorgio Moro da Ficino, and Beltramo. (*L' Arte*, 1902, p. 124.)

Sforza Portraits by Luini. — Fourteen portraits in fresco, representing various members of the Sforza family, have been recently acquired for the Municipal Museum of Milan. These portraits are judged to be by Luini. (*L' Arte*, 1902, p. 124.)

Frescoes at San Pietro in Gessate. — Through the assistance of funds supplied by Dr. Guido Cagnola, the whitewash has been removed from the vault of the Cappella Grifo, in the Church of San Pietro in Gessate. The decorations of this chapel were by Bernardino Zenale and Bernardino Butinone. The frescoes of the vault are found to have been four large figures of angels. (*L' Arte*, 1902, p. 123.)

MONTERUBBIANO. — A Painting by Pietro Alamanni. — In the Franciscan church at Monterubbiano, the predella of the altarpiece contains an inscription in Gothic characters and the signature *Petrus Alm' de Choethei*. The inscription shows that the painting was made in the time of Sixtus IV, 1471-1484, a period when Pietro Alamanni was a young man and strongly influenced by his master, Carlo Crivelli. The signature is interesting as containing for the first time the name of the town from which he came. (*L' Arte*, 1902, pp. 178-180.)

PIACENZA. — A Virgin by Botticelli. — A few years ago a picture by an old master was discovered concealed behind a gun-rack in the Castello di Bardi, and removed to the Municipal Library of Piacenza. The picture, recently examined by Professor Adolfo Venturi, has been identified by him as one of the lost masterpieces of Sandro Botticelli. It is painted on wood, oval in shape, enclosed in an exquisitely carved frame, and represents the Virgin Mary kneeling before the Infant Jesus, reclining among flowers in company with St. John the Baptist. (R. LANCIANI, *Athen*. September 6, 1902.)

REGGIO DELL' EMILIA. — Illustrated Fragments of the Divine Comedy. — In the *Rassegna d' Arte*, 1902, pp. 138-139, ANDREA BALLETTI

publishes three miniatures from a fragment of the Divine Comedy now in the archives at Reggio dell' Emilia. They are illustrations of the twenty-second canto of the *Purgatorio*. The text appears to be carefully inscribed and with the miniatures is assigned to the second half of the fourteenth century.

ROME. — The Magistri Aedificiorum Urbis. — In the *Arch. Soc. Rom.* 1902, pp. 5-60, L. SCHIAPARELLI publishes a series of thirteen documents relating to the Magistri and Sub-Magistri Aedificiorum Urbis. The documents date from 1233 to 1390, and from them he tabulates the names of those who held this office during that period.

Sant' Agnese. — In the course of excavations made to ascertain what connection existed between the church of Sant' Agnese and the adjacent catacombs, the foundations of the original apse were brought to light. The magnificent urn cast under Paul V (1615), of solid silver, to hold the relics of the saint was discovered. An inscription was found proving the early foundation of a monastic establishment. It reads: "Here lies in peace Serena, abbess, virgin sacred to God, aged eighty-five. She was laid to rest on May 9 (514 A.D.) in the consulship of (Flavius Magnus Aurelius Cassiodorus), Senator." (R. LANCIANI, *Athen.* September 6, 1902.)

St. Saba. — In the restoration of St. Saba on the Aventine, under the arches which separate the oratory from the left aisle, primitive pictures have come to light. The mosaic pavement of the central nave has been removed, and the whole area has been excavated. Old walls covered with paintings have been found, tombs, a sarcophagus, sculptured and inscribed fragments, and hanging lamps. (M. E. CANNIZZARO and I. C. GAVINI, *Not. Scavi*, 1902, pp. 270-273; plan, 3 figs.)

A Portico of the Thirteenth Century. — At the corner of the Via de' San Marco and the Via della Pedacchia, Count Sacconi has discovered extensive remains of a portico built in the thirteenth century with columns, bases, and capitals removed from older buildings. The portico has been attributed to the church of St. Lorenzo in Pensilis (or de Paracera or ad Balneas Palacinas), which was built in the eighth century and was apparently destroyed before 1400 A.D. More probably it belonged to a mediaeval house. (R. LANCIANI, *Athen.* September 6, 1902.)

Sale of the Barberini Collections. — The library and the collections of the Barberini — not including, however, the picture gallery — have been bought by the Vatican for half a million lire. The library contains many interesting and important manuscripts, documents, and autograph letters. The collection of antiquities contains some remarkable inscriptions and a unique collection of bronze cists found at Palestrina (Praeneste) on the estates of the Barberini. (*Athen.* October 4 and October 25, 1902.)

A Fresco by Benozzo Gozzoli. — In a crude tabernacle on the walls of a house in the Tribuna di Campitelli in Rome, there is a weather-worn fresco exposed to view. This is published in *L'Arte*, 1902, pp. 252-254, by ATTILIO ROSSI, who describes it as an early work of Benozzo Gozzoli when he was still under the influence of Fra Angelico.

VENICE. — Acquisitions of the Gallery. — Among the recent acquisitions of the Gallery of Venice may be mentioned an excellent portrait, probably by Jacopo Bassano, and a signed triptych by Catarina. (*L'Arte*, 1902, pp. 125-126.)

A Frame by Jacopo Faentino.—In the restoration of the Pesaro chapel, in the Church of the Frari at Venice, the famous altarpiece by Giovanni Bellini was taken down. On the back of the frame is found the following inscription: *fecit 1488. a di 15 decembris maestro iachomo de fueca.* The authorship of this very beautiful frame is therefore known. Jacopo Faentino was also the author of the frame of the polyptych, painted in 1477 by Bartolomeo Vivarino, and now in the Gallery of Vienna. (*L'Arte*, 1902, p. 125.)

Discovery of a Fresco by Zuccari.—In the Cappella Grimani in the Church of S. Francesco della Vigna in Venice, there has been discovered a fresco representing the 'Adoration of the Magi' by Fredrico Zuccari. This fresco mentioned by Vasari and engraved by Sadeler about 1600 is published by G. CANTALAMESSA in *Rassegna d'Arte*, 1902, pp. 49-52.

A Mater Dolorosa.—The 'Mater Dolorosa' was treated several times by Titian. Two paintings of this subject by him are in the Royal Gallery at Madrid, a third in the Uffizi at Florence, and a fourth, which has recently come to light in Venice, is now in the possession of the Venice Art Company. This is described by ANTONIO DELLA ROVERE in the *Arte e Storia*, 1902, pp. 109-110.

The Fall of the Tower of St. Mark's.—On the 14th of July, 1902, the celebrated campanile of S. Marco fell to the ground, burying with it the Loggetta of Sansovino and damaging also the Library of San Marco, but fortunately injuring in no respect the Basilica of San Marco or the Ducal Palace. In the *American Architect*, August 9, 1902, p. 46, ALFREDO MELANI records the fall of the tower and gives its history. *Ibid.* p. 47, C. HOWARD WALKER publishes a series of sketches to exhibit the manner in which the tower fell, and *ibid.* August 23, A. ROBERTSON writes concerning the probable cause of the accident. The *Rassegna d'Arte*, August, 1902, publishes a number of illustrations of the campanile and surrounding buildings before and after the fall of the campanile. In the same number CARLO MALAGOLA gives an account of the injuries and repairs which the campanile had received prior to its fall.

A careful historical study of the campanile is also published by ANTONIO DELLA ROVERE in *Arte e Storia*, 1902, pp. 93-98.

The tower is to be reconstructed largely from the same material, and in accordance with the old design, under the direction of Signor J. Boni, who has in his possession the most exact drawings. Subscriptions for this purpose have been made by the municipalities of Venice and Milan. The National Arts Club of New York, through its treasurer, Spencer Trask, will be glad to forward any subscriptions which may be offered in the United States.

VICENZA.—The Basilica of Palladio.—In the *Rassegna d'Arte*, 1902, pp. 136-138, FULGENZIO SETTI writes concerning the Basilica Palladiana at Vicenza, and calls attention to the insecurity of its present foundations. The building requires early attention on the part of competent engineers, in order to be saved from certain destruction.

FRANCE AND BELGIUM

BRUGES.—Exhibition of Early Flemish Paintings.—The notable exposition of early Flemish paintings gathered at Bruges in 1902 is described by HENRI HYMANS in the *Gaz. B.-A.* 1902, pp. 89-100, 189-207, 280-306;

and by JULES HELBIG in *R. Art Chrét.* 1902, pp. 365-373. The paintings in this exposition came not merely from Belgium, but also from France, Germany, and England. All of the important early Flemish painters were here well represented, the exposition of the works of Memling and of Gérard David being exceptionally noteworthy. In view of the exceptional importance of this exposition for the history of early Flemish painting, a volume entitled *L'Exposition des Primitifs flamands à Bruges* has been prepared by H. HYMANS and published by the *Gaz. B.-A.* 1902.

PARIS. — Museum of the Louvre. — The Museum of the Louvre has recently received a legacy from M. de Vandeuil. Amongst the paintings received from this source may be mentioned two panels by Piero di Cosimo, two portraits of the school of Giovanni Bellini, and a Holy Family by Bronzino. (*Chron. d. Arts*, 1902, p. 215; *L'Arte*, 1902, pp. 255-259.) Dr. Gillet has presented to the Museum sixteen fine eighteenth-century miniatures, four of which are by Antoine Vestier and twelve by Dumont. Amongst the latter are portraits of Marie Antoinette, of the Princess Lamballe, of the Count de Provence, and of Dumont himself. (*Chron. d. Arts*, 1902, p. 270.) A painting by Gerardo di Saint Jean of Haarlem has been presented to the Louvre. Works by this master are exceedingly rare. This painting represents the 'Resurrection of Lazarus.' It seems to have been removed to Spain in 1573, and found its way to Paris in 1857 and to the Louvre in the present year. (*L'Arte*, 1902, pp. 259-260.)

A Manuscript of Interest for the Study of Leonardo da Vinci. — In the Bibliothèque Nationale at Paris there is a little volume, No. 761 of the new Latin acquisitions, containing the *Minutiae* of Marliano and Alkindi's *De proportionibus et proportionalitate*. The margins of these treatises contain a number of sketches in the style of Leonardo da Vinci. One series relates to his painting and seems to consist of copies of his preliminary sketches. These are of interest for the 'St. Anne' of the Royal Academy, London, the 'Holy Family' of the Hermitage, and for the portrait known as 'La Gioconda.' A second series is copied from the *Codex Atlanticus* in the Ambrosian Library at Milan. A third series represents busts of men. In the *Gaz. B.-A.* XXVIII, 1902, pp. 177-188, LÉON DOREZ concludes that these sketches may have been made by Francesco Melzi, to whom Leonardo left his books and instruments.

Exposition of Gobelins Tapestries at the Grand Palais. — In celebration of the three hundredth anniversary of the foundation of the Gobelins manufactory, an exposition of early French tapestries is being held at the Grand Palais. The exposition is restricted to tapestries from the Royal atelier of Henry IV, Louis XIII, Louis XIV, and Louis XV. A very competent notice of this exposition is given by JULES GUIFFREY in *Gaz. B.-A.* XXVIII, 1902, pp. 265-279.

GERMANY

DISCOVERY OF FRESCOS. — The churches of St. Leonard at Frankfort, the Church of Pelkum (Westphalia), and the Church of the Holy Spirit at Nuremberg have recently revealed frescoes which have for some time been covered with whitewash. The fresco from the Church of Pelkum represents a large figure of Christ and is dated apparently from the thirteenth century, while the frescoes at Nuremberg represent the death of the Virgin, the twelve apostles, a colossal St. Christopher, and other

subjects painted apparently in the fifteenth century. (*Chron. d. Arts*, 1902, p. 246.)

COLOGNE.—Two Portraits by Sebastiano del Piombo.—Two portraits by Sebastiano del Piombo, one of which represents Vittoria Colonna, have been acquired by the museum at Cologne. (*L'Arte*, 1902, p. 132.)

ENGLAND

ITALIAN ART IN ENGLAND.—In the *Gaz. B.-A.* 1902, pp. 441-454, HERBERT COOK continues his article on the 'Treasures of Italian Art in England.' This article considers the Wallace collection and publishes illustrations of the central portion of an altarpiece by Cima da Conegliano, 'A Persens and Andromeda' by Titian, and 'Madonnas' by Andrea del Sarto and by Luini.

LONDON.—Italian Paintings exhibited at the National Academy.—In *L'Arte*, 1902, pp. 114-122, HERBERT COOK publishes a number of Italian paintings recently exhibited at the National Academy. These are: 'An Adoration of the Shepherds,' by Vincenzo Catena; 'A Madonna,' by Crivelli; two panels of 'The History of David,' by Pesellino; 'A Portrait of Veronica Gambara,' by Bartolomeo Veneto; 'A Portrait of a Man,' by an artist of the Venetian school; 'A Holy Family,' by Fra Bartolomeo; 'An Altarpiece,' by Lanini; 'Simonetta,' by Botticelli; 'A Madonna,' attributed to Raphael; and part of the predella of the painting by Raphael recently purchased by Mr. J. P. Morgan.

LONDON.—St. Paul's Cathedral.—The incrustation which has gathered on the stone of St. Paul's Cathedral has been subjected to chemical analysis. A paper was recently read on this subject by Mr. E. G. CLAYTON before the London Chemical Society. In the *American Architect*, 1902, p. 95, JOHN HUGHES presents also an analysis of this incrustation. He concludes that "it is evidently composed chiefly of hydrated sulphate of lime associated with some silicious matter and minute particles of carbon in the form of soot. The solvent action exerted by rain charged with sulphurous and sulphuric acid derived from the gases and smoke of innumerable chimneys of the surrounding buildings, has, after the lapse of two centuries, transformed the original carbonate of lime of the Portland stone into sulphate of lime, which, in a more or less soluble condition, has been carried by water action and gradually deposited as calcareous tufa or stalagmite on the under side of the coping stone.

"The practical conclusion to be drawn from this research is very obvious; namely, that buildings in large cities, and especially in manufacturing towns, should not be constructed of limestone, which is readily decomposed by the acids existing in the smoke due to the use of coal largely impregnated with sulphur."

LONDON.—A Neo-Byzantine Cathedral.—The revival of interest in Byzantine architecture finds expression in the new cathedral at Westminster, London, as well as in the new cathedral of St. John, New York. The new cathedral at Westminster, designed by John Francis Bentley, is published in a well-illustrated article in the *Arch. Rec.* for August, 1902, pp. 316-337. The general plan of this cathedral, as well as its decorative details, are of more than ordinary interest.

ABBREVIATIONS

Abh.: Abhandlungen. *Acad.*: Academy (of London). *Am. Ant.*: American Antiquarian. *Am. J. Arch.*: American Journal of Archaeology. *Ami d. Mon.*: Ami des Monuments. *Ann. d. Ist.*: Annali dell' Istituto. *Anz. Schw.*: Anzeiger für Schweizerische Altertumskunde. *Arch. Ael.*: Archaeologia Aeliana. *Arch.-Ep. Mitth.*: Archäol.-epigraph. Mittheil. (Vienna). *Arch. Anz.*: Archäologischer Anzeiger. *Arch. Portug.*: O Archeologo Português. *Arch. Rec.*: Architectural Record. *Arch. Hess. Ges.*: Archiv für Hessische Geschichte und Altertumskunde. *Arch. Rel.*: Archiv für Religionswissenschaft. *Arch. d. Miss.*: Archives de Missions Scientifiques et Littéraires. *Arch. Stor. d. Art.*: Archivio Storico dell' Arte. *Arch. Stor. Lomb.*: Archivio storico lombardo. *Arch. Stor. Nap.*: Archivio Storico Provincie Napolitane. *Arch. Stor. Patr.*: Archivio della r. società romana di storia patria. *Athen.*: Athenaeum (of London).

Beitr. Ass.: Beiträge zur Assyriologie. *Berl. Akad.*: Preussische Akademie der Wissenschaften zu Berlin. *Berl. Phil. W.*: Berliner Philologische Wochenschrift. *Berl. Stud.*: Berliner Studien. *Bibl. Éc. Chartes*: Bibliothèque de l'École des Chartes. *B. Ac. Hist.*: Boletín de la real Academia de la Historia. *B. Arch. d. M.*: Bulletin Archéol. du Ministère. *B. Arch. C. T.*: Bulletin Archéologique du Comité des Travaux hist. et scient. *B. C. H.*: Bulletin de Correspondance Hellénique. *B. Inst. Ég.*: Bulletin de l'Institut Égyptien (Cairo). *B. M. Soc. Ant. Fr.*: Bulletin et Mémoires de la Société des Antiquaires de France. *B. Soc. Anth.*: Bulletin de la Société d'Anthropologie de Paris. *B. Soc. Yonne*: Bulletin de la Société des Sciences historiques et naturelles de l'Yonne. *B. Mon.*: Bulletin Monumental. *B. Arch. Stor. Dal.*: Bullettino di Archeologia e Storia Dalmata. *B. Com. Roma*: Bullettino d. Commissione Archeologica Comunale di Roma. *Bull. d. Ist.*: Bullettino dell' Istituto. *B. Arch. Crist.*: Bullettino di Archeologia Cristiana. *B. Paletn. It.*: Bullettino di Paletnologia Italiana. *Byz. Z.*: Byzantinische Zeitschrift.

Chron. d. Arts: Chronique des Arts. *Cl. R.*: Classical Review. *C. R. Acad. Insc.*: Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres. *C.I.A.*: Corpus Inscriptionum Atticarum. *C.I.G.*: Corpus Inscriptionum Graecarum. *C.I.G.S.*: Corpus Inscriptionum Graeciae Septentrionalis. *C.I.L.*: Corpus Inscriptionum Latinarum. *C.I.S.*: Corpus Inscriptionum Semiticarum.

Δελτ. 'Αρχ.: Δελτίον 'Αρχαιολογικόν. *D. & S. Dict. Ant.*: Dictionnaire des Antiquités grecques et romaines par Ch. Daremberg et Edm. Saglio, avec le concours de E. Pottier.

Échos d'Or.: Les Échos d'Orient (Constantinople). *'Εφ. 'Αρχ.*: 'Εφημερίς 'Αρχαιολογική. *Eph. Epig.*: Ephemeris Epigraphica.

Fundb. Schwab.: Fundberichte aus Schwaben, herausgegeben vom württembergischen anthropologischen Verein.

Gaz. B.-A.: Gazette des Beaux-Arts.

I. G. A.: Inscriptiones Graecae Antiquissimae, ed. Roehl. *I. G. Ins.*: Inscriptiones Graecarum Insularum. *I. G. Sic. It.*: Inscriptiones Graecae Siciliae et Italiae. *Intermédiaire*: Intermédiaire de chercheurs et des curieux.

Jb. Alt. Ges. L. P.: Neue Jahrbücher für das klassische Altertum, Geschichte und deutsche Litteratur und für Pädagogik. *Jb. Arch. I.*: Jahrbuch d. k. d. Archäol. Instituts. *Jb. Phil. Päd.*: Neue Jahrbücher für Philologie und Pädagogik (Fleckeisen's Jahrbücher). *Jb. Preuss. Kunsts.*: Jahrbuch d. k. Preuss.

Kunstsammlungen. *Jb. V. Alt. Rh.*: Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande. *Jb. Ver. Dill.*: Jahrbuch des Vereins Dillingen. *Jh. Oesterr. Arch. I.*: Jahreshefte des oesterreichischen archäologischen Instituts. *J. Asiat.*: Journal Asiatique. *J. Am. Or. S.*: Journal of American Oriental Society. *J. Anth. Inst.*: Journal of the Anthropological Institute of Great Britain and Ireland. *J. Br. Arch. Ass.*: Journal of the British Archaeological Association. *J. H. S.*: Journal of Hellenic Studies. *J. Int. Arch. Num.*: *Διόντης Ἐφημερίς τῆς νομισματικῆς ἀρχαιολογίας*, Journal international d'archéologie numismatique (Athens).

Kb. Gesamtver.: Korrespondenzblatt des Gesamtvereins der deutschen Geschichts- und Altertumsvereine. *Kb. Wd. Z. Ges. K.*: Korrespondenzblatt der Westdeutschen Zeitschrift für Geschichte und Kunst. *Kunstchron.*: Kunstchronik.

Lex. Myth.: Ausführliches Lexikon der griechischen und römischen Mythologie, herausgegeben von W. H. Roscher (Leipsic, Teubner).

Mél. Arch. Hist.: *Mélanges d'Archéologie et d'Histoire* (of French School in Rome). *Athen. Mitth.*: Mittheilungen d. k. d. Archäol. Instituts, Athen. Abth.

Röm. Mitth.: Mittheilungen d. k. d. Archäol. Instituts, Röm. Abth. *Mitth. Anth. Ges.*: Mittheilungen der anthropologischen Gesellschaft in Wien. *Mitth. C.-Comm.*: Mittheilungen der königlich-kaiserlichen Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmale. *Mitth. Nassau.*: Mittheilungen des Vereins für nassauische Altertumskunde und Geschichtsforschung. *Mitth. Vorderas. Ges.*: Mittheilungen der vorderasiatischen Gesellschaft. *Mon. Antichi*: Monumenti Antichi (of Accad. d. Lincei). *Mon. Mém. Acad. Insc.*: Monuments et Mémoires pub. par l'Acad. des Inscriptions, etc. *Mün. Akad.*: Königlich Bayerische Akademie der Wissenschaften, München. *Mus. Ital.*: Museo Italiano di Antichità Classiche.

N. D. Alt.: Nachrichten über deutsche Altertumsfunde. *Not. Scavi*: Notizie degli Scavi di Antichità. *Num. Chron.*: Numismatic Chronicle. *N. Arch. Ven.*: Nuovo Archivio Veneto. *N. Bull. Arch. Crist.*: Nuova Bulletino di Archeologia cristiana.

Pal. Ex. Fund.: Palestine Exploration Fund. *Πρακτικά*: *Πρακτικά τῆς ἐν Ἀθήναις ἀρχαιολογικῆς ἐταιρείας*.

R. Tr. Eg. Ass.: Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes. *Reliq.*: Reliquary and Illustrated Archaeologist. *Rend. Acc. Lincei*: Rendiconti d. r. Accademia dei Lincei. *Rep. f. K.*: Repertorium für Kunstwissenschaft. *R. Assoc. Barc.*: Revista de la Asociación artistico-arqueologica Barcelonesa. *R. Arch. Bibl. Mus.*: Revista di Archivos, Bibliotecas, y Museos. *R. Arch.*: Revue Archéologique. *R. Art Anc. Mod.*: Revue de l'Art ancien et moderne. *R. Belge Num.*: Revue Belge de Numismatique. *R. Bibl.*: Revue Biblique Internationale. *R. Crit.*: Revue Critique. *R. Art Chrét.*: Revue de l'Art Chrétien. *R. Hist. d. Rel.*: Revue de l'Histoire des Religions. *R. Or. Lat.*: Revue de l'Orient Latin. *R. Ep. M. Fr.*: Revue Épigraphe du Midi de la France. *R. Ét. Gr.*: Revue des Études Grecques. *R. Ét. J.*: Revue des Études Juives. *R. Num.*: Revue Numismatique. *R. Sém.*: Revue Sémitique. *Rhein. Mus.*: Rheinisches Museum für Philologie, Neue Folge. *R. Abruzz.*: Rivista Abruzzese di Scienze, Lettere ed Arte. *R. Ital. Num.*: Rivista Italiana Numismatica. *R. Stor. Calabr.*: Rivista Storica Calabrese. *R. Stor. Ital.*: Rivista Storica Italiana. *Röm. Quart.*: Römische Quartalschrift für christliche Altertumskunde und für Kirchengeschichte.

Sächs. Ges.: Sächsische Gesellschaft (Leipsic). *S.G.D.I.*: Sammlung der Griechischen Dialekt-Inschriften. *Sitzb.*: Sitzungsberichte. *S. Rom. d. Stor. Pat.*: Società Romana di Storia Patria. *Soc. Ant. Fr.*: Société des Antiquaires de France. *Soc. Ant.*: Society of Antiquaries. *S. Bibl. Arch.*: Society of Biblical Archaeology, Proceedings.

Θρακ. Ἐπ.: *Θρακικὴ Ἐπετηρίς, εἰρήσιον δημοσίευμα τῆς ἐν Ἀθήναις θρακικῆς ἀδελφότητος*.

Wiener Z. Morgenl.: Wiener Zeitschrift für die Kunde des Morgenlandes. *Z. D. Pal. V.*: Zeitschrift des Deutschen Palestina Vereins. *Z. Aeg. Sp. Alt.*: Zeitschrift für Aegyptische Sprache und Altertumskunde. *Z. Assyrl.*: Zeitschrift für Assyriologie. *Z. Bild. K.*: Zeitschrift für Bildende Kunst. *Z. Ethn.*: Zeitschrift für Ethnologie. *Z. Mün. Alt.*: Zeitschrift des Münchener Alterthumsvereins. *Z. Num.*: Zeitschrift für Numismatik.

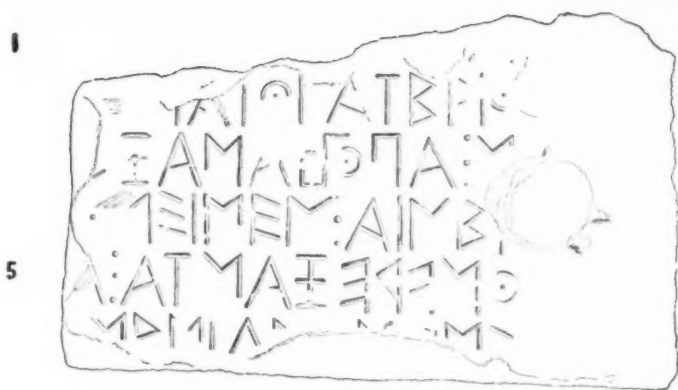
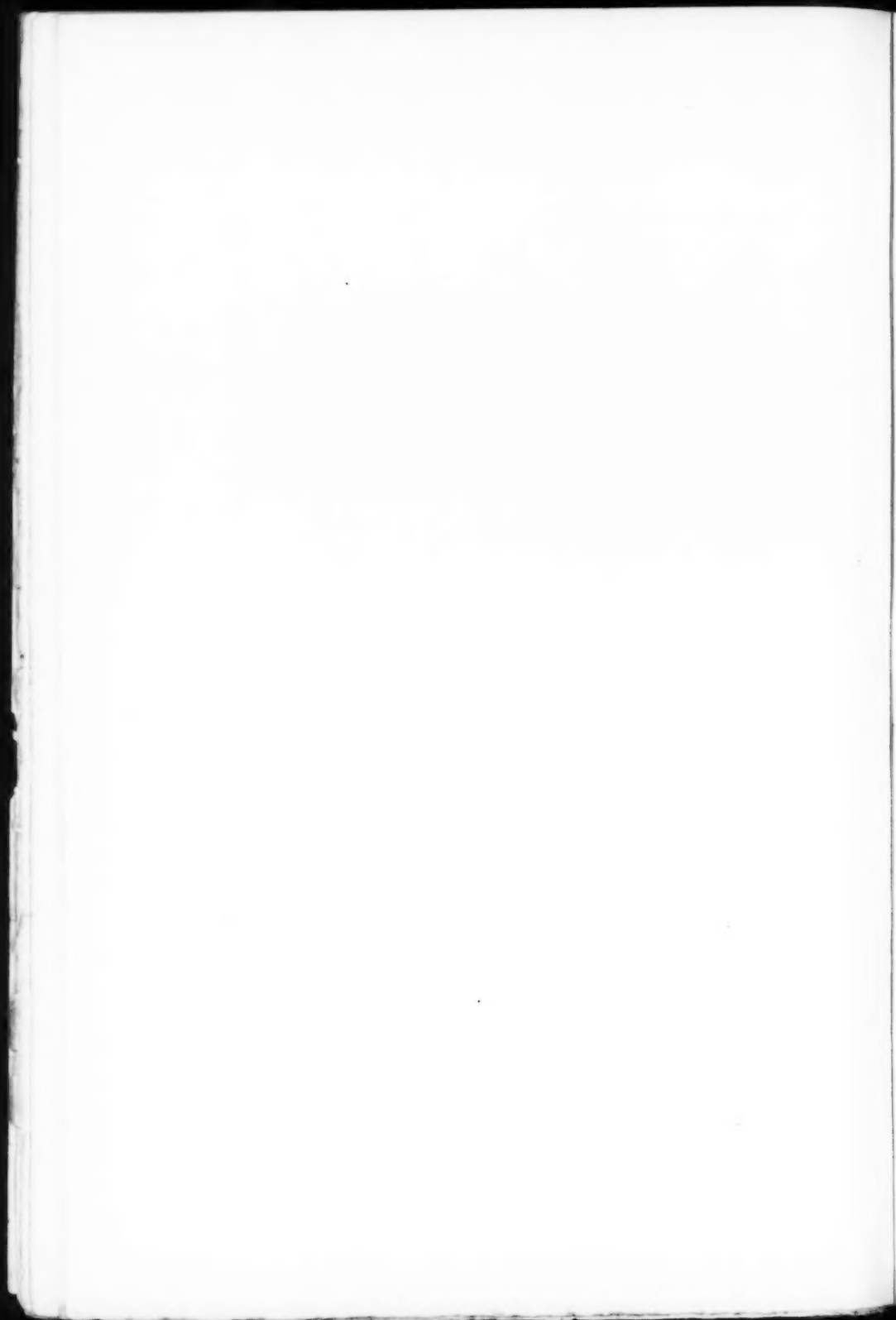


FIGURE 1.—ARCHAIC INSCRIPTION FROM CLEONAE: FACE A.





FIGURE 2.—ARCHAIC INSCRIPTION FROM CLEONAE: FACE B.



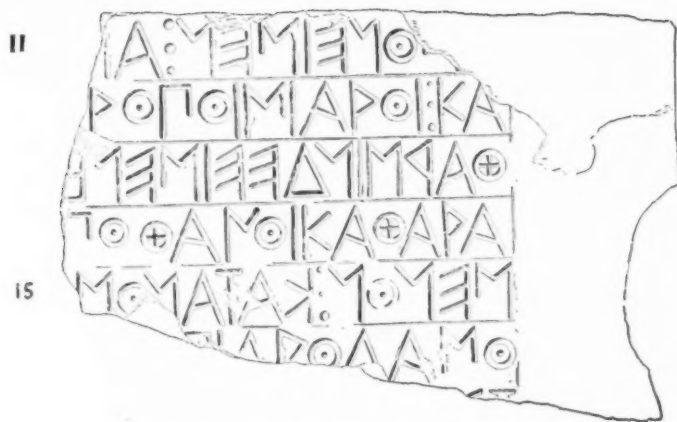
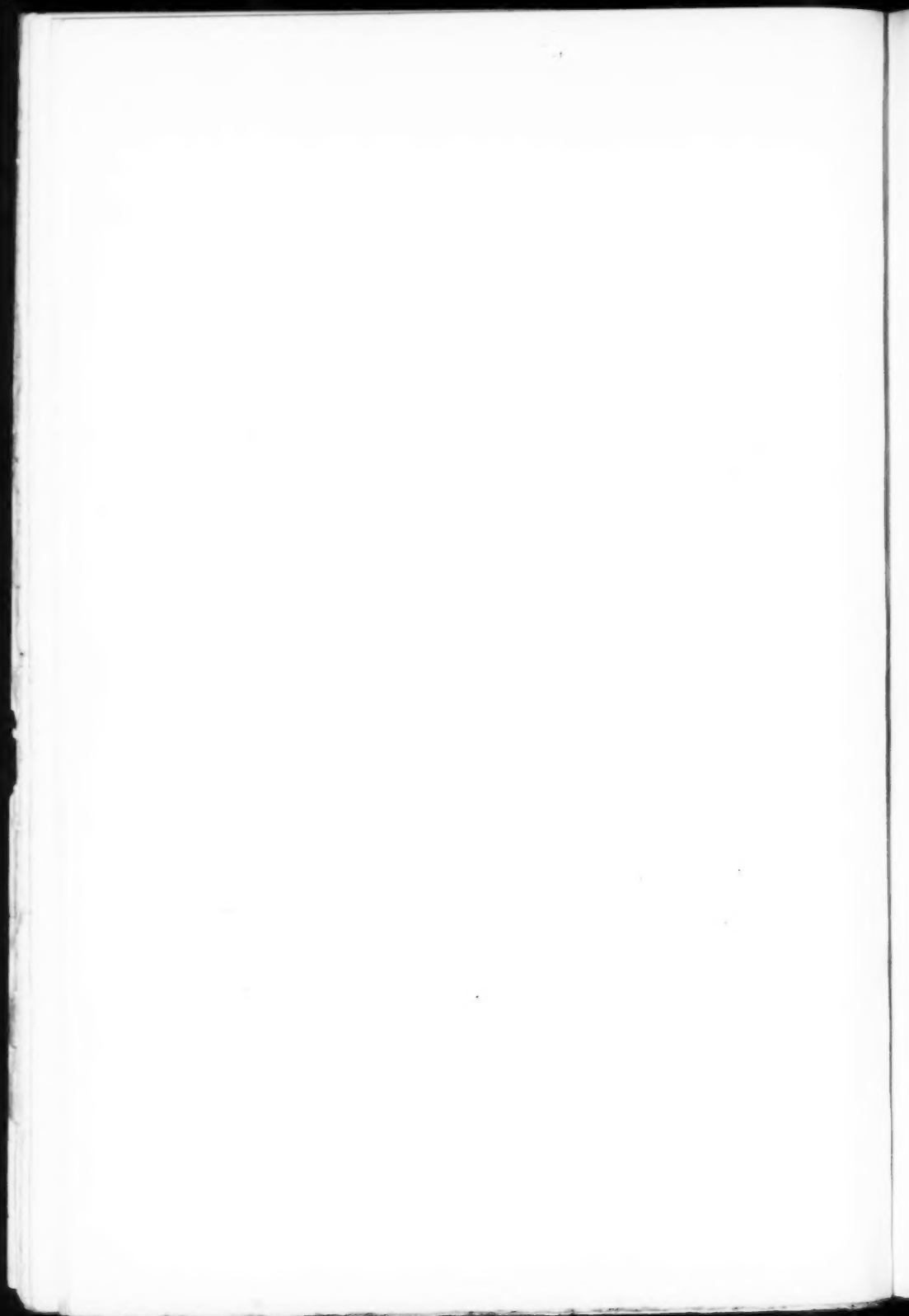


FIGURE 3.—ARCHAIC INSCRIPTION FROM CLEONAE: FACE C.



ARCHAIC INSCRIPTIONS FROM CLEONAE AND
CORINTH¹

I

THE inscription reproduced in Figs. 1-3 was found in the house of a peasant of Hagios Vasilios, a village some twelve miles south of Old Corinth. Professor Alfred Emerson and Dr. C. N. Brown saw the stone on a visit to the place in April of 1898, but were unable to examine it on account of the jealousy of the owner. Some weeks later, at the suggestion of Dr. Brown, I stopped at the village and succeeded in obtaining squeezes of the inscription, and the following winter purchased it and brought it to Athens, where it is at present in the National Museum.

The stone is poros of a light brown color. It is but a fragment, one corner of a quadrangular block whose height and breadth are unknown. The original thickness, however, is preserved, 0.124 m. The present height is 0.381 m. to 0.385 m.; the present breadth 0.188 m. to 0.266 m. Parts of four original surfaces remain, of which three are inscribed. Photographs of these are given, as well as drawings which I made from the stone. In the latter only those lines are represented which seemed a part of the original inscription, except where broken places in the surface have been indicated. The arrangement of the faces is exactly like that of the archaic Latin inscription unearthed in the Roman Forum in 1898.²

¹ These inscriptions have already appeared in the *Corpus Inscriptionum Graecarum Peloponnesi et Insularum Vicinarum* as numbers 1607 and 1597. My thanks are due to the editor, Dr. Max Fränkel, for some valuable suggestions.

² *Not. Scavi*, May, 1899; D. Comparetti, *Insc. arc. del Foro Romano*.
American Journal of Archaeology, Second Series. Journal of the
Archaeological Institute of America, Vol. VII (1903), No. 2.

Apparently the stone from Hagios Vasilios also is the lower part of a pillar whose sides were covered with vertical rows of letters, following the *boustrophedon* order, the faces succeeding each other from right to left. The same vertical arrangement of the letters occurs in the Salamis *psephisma* (*C.I.A.* IV,¹ p. 57, p. 164, 1, a).¹

Two of the inscribed faces are in a state of excellent preservation. Face *A*, however, is much worn and its original surface is quite rubbed away, so that the outlines of the letters are very faint. Moreover, it is seamed in all directions by scratches, hardly to be distinguished in some cases from the letters. Near the bottom a deep hole has been mauled. Traces of mortar on the broken edges of the stone indicate that in its later history it was built into a wall.

At the base of the pillar is a margin, 0.101 m. broad, which on face *C* is marked off by a faint line. The rows of letters are separated by lines cut rather less deeply than the characters themselves. On face *B* these lines extend across the margin to the edge of the stone; on *C* they stop at the bounding line just mentioned, while on *A* they are altogether worn away. The space between these lines on *C* is 0.038 m. The height of the letters in general is 0.034 m.; the diameter of *o* and *θ*, 0.02 m. On *A* the letters are of the same size, but on *B* they are smaller. Here the space between the lines is only 0.03 m.; the general height of the letters, 0.027 m.; the diameter of *o* and *θ*, 0.019 m. These circular letters were outlined with a compass. Their center is a hole, bored in the stone, deeper than any other mark. In some cases on the first face the outline of the letter is quite obliterated, but the hole is still prominent. A row of three dots is used as a mark of punctuation for separating phrases, but they are larger than these central points and not bored deep like them. The cross bar of *a* slants down to the left or right with perfect regularity according as the line reads in the retrograde or left-to-right direction. The whole workmanship shows the greatest care and skill.

¹ B. Gräf, *Mith. Athen.* 1890, p. 24; A. Wilhelm, *Mith. Athen.* 1898, p. 466.

The archaic character of the inscription is immediately evident from the *boustrophedon* order. Other indications are the presence of ϣ in line 5, the closed sign for the rough breathing in lines 7 and 13, the expression of the sibilant by the sign *san* in line 13, and the old forms of α, ν, and ε.

The connection of the alphabet with that of Corinth is apparent from the peculiar form of β in line 3, and the expression of an *e* sound by the character β. It is, however, distinguished from the Corinthian alphabet by certain important features.

(1) The two alphabets differ in the use of the characters for *e* sounds. There are two of these, the ox-yoke ε, β, and the comb-shaped e, ξ. At Corinth β represented both ε and η, while ξ was used for the diphthong ει, both genuine and spurious. This is not the usage of the stone from Hagios Vasilios. In line 4 occurs the infinitive εἶμεν. Here clearly ε is represented by ξ and spurious ει by ξ|; so also in φρέξαντα of line 5, μηθέν of lines 8 and 10, and δέ of line 13. Again in line 8 is the word χρήμα. Here β represents η, as also in the negatives μή of line 6 and μηθέν of lines 8 and 10.

(2) The sign for ι is a straight line, while the older Corinthian inscriptions have a broken line of four or three strokes. It is true that straight ι appears at Corinth, but only on monuments bearing the marks of a later date than the one in question.

(3) In line 16 we read — ιαρὸ δάμο. This can be nothing else than the genitive singular with the final vowel sound expressed by a single sign. But one distinguishing mark of the Corinthian alphabet was that it represented this spurious ου by two characters.

What was the community which used this alphabet, kindred to the Corinthian, yet separated from it by such peculiarities? The village of Hagios Vasilios is less than two miles from the site of old Cleonae, a hill now known as Volimoté. The owner of the stone told me merely that he found it in his field, but another villager stated definitely that it came from Volimoté. And so it is clear that the little state, cramped between Corinth

and Argos, had an alphabet of its own. There are present on the stone nineteen different letters. ξ appears in lines 3 and 5 and χ in line 8. υ , ϕ , ψ , and γ do not occur. Neither are there any indications as to the use of φ . I believe the upright stroke in the middle of line 2 to be the remains of λ of the Corinthian form, Γ ; in that case probably γ also had the Corinthian form, ζ .

From the situation of Cleonae, Argive as well as Corinthian influence would be expected on its alphabet. This is, in fact, the case. The table shows the letters in which Corinth and Argos differ arranged in parallel columns with the corresponding forms from Cleonae between them.

| | CORINTH | CLEONAE | ARGOS |
|-----------------------|-------------------|------------|----------|
| β | Γ | Γ | Γ |
| δ | Δ | Δ | D |
| λ | Γ | $\Gamma?$ | Γ |
| γ | ζ | $[\zeta]?$ | Γ |
| η | Ξ | Ξ | Ξ |
| ϵ | Ξ | Ξ | Ξ |
| ι | ξ and ζ | I | I |
| Spurious ov | $O\gamma$ | \odot | O |

It will be seen that Cleonae agrees with Corinth in using the peculiar sign for β , in the triangular δ , probably in the form of λ , possibly, too, in that of γ , and in expressing η by Ξ . Cleonae agrees with Argos in the use of Ξ as ϵ , in the straight ι , and in expressing spurious ov by simple O .

These resemblances to Argive usage are, however, of a general sort such as are common to other alphabets, but the peculiar β and the ox-yoke ϵ point to a more intimate relation. This is interesting, because the few historical references which we possess link Cleonae with Argos, not with Corinth. In 468 B.C. the town assisted Argos in the destruction of Mycenae.¹ Some time before the middle of the fifth century the control of the Nemean games passed from the Cleonaeans to the Argives.²

¹ Strabo, p. 377.

² Busolt, *Griech. Gesch.* I,² p. 669, n. 3.

In 457 B.C. they fought among the Argive forces at Tanagra,¹ and again in 418 B.C. at Mantinea.² The stone from Hagios Vasilios, however, belongs to an earlier time before the Argive influence became predominant. The testimony of the alphabet, if inferences so important may be drawn from evidence so slight, would be that in this period of independence, the state was more closely connected with Corinth.

But although in certain peculiarities the Cleonaeen alphabet shows the influence of one or the other of the great states between which it lay, its most distinctive feature is strange to both alike. It is truly remarkable that a small inland city, whose whole importance grew out of the fact that it lay on the high road between Argos and Corinth should be alone in expressing ϵ and η by different signs, at a time when all the other alphabets of the Hellenic peninsula, so far as we know, made use of but one symbol for both.

Another monument of this little state has come down to us, the fragments of a marble *stèle*,³ found at Athens, which Böckh identified⁴ with the memorial of the Cleonaeans who fell at Tanagra, seen by Pausanias¹ in the Cerameicus. The last four letters of the name Tanagra, on one of the more recently discovered fragments, prove how correct his judgment was. This inscription shows not a trace of the peculiarities noted on the stone from Hagios Vasilios, but is written in ordinary Argive letters. Either by 457 B.C. the Argive domination had quite crushed out the native alphabet, or more probably the epitaph is the work not of a Cleonaeen but an Argive hand. An indication in favor of the latter view may be drawn from the fact that the peculiar position of ξ , which is here turned on its side, in the epitaph, occurs also on an inscribed tripod base, uncovered by the American excavators at the Argive Heraeum.⁵ This position of ξ would seem to be an Argive fashion.

¹ Paus. I, xxix, 7.

³ C.I.A. I, 441, IV,¹ p. 107, p. 132.

² Thuc. V, 67.

⁴ C.I.G. I, 166.

⁵ Am. J. Arch. 1896, p. 58; Waldstein, *Argive Heraeum*, p. 205, vi.

The transcription of the inscription from Hagios Vasilios is as follows:

- 2 — [τ]α [τ]δ[λ]ατή[ρι]ο
 ν : ἀπόβαμα ξ[ε] —
 — ος εἶμεν : αἰνη[τ]
 5 ὃν φρέξαντα : α —
 μῆ μι[αρό]ν [εἰ]μ[ε]
 [ν] : αἰ ᾧ[νθρ]οπον ἡ[α] —
 — αὐτα χρῆμα μῆθ
 ἐν : μιάρὸν εἶμεν
 10 — ατον μῆθεν [ἡ]λα
 [σμ]ὸν εἶμεν : α —
 ἀνθ]ρόποι μιάρῳι : κά
 θαρσιν δὲ εἶμεν ἡ —
 ᾧ]ποθάνοι καθαρὰ
 15 μενον : κατὰ νόμ[ον]
 [ἡ]ιάρῳ δάμο
 [ξε] —

That the document deals with defilement and purification is clear from the words *μιάρὸν* of line 9 and *κάθαρσιν* of line 12. The broken word at the turn of lines 10 and 11 throws further light on its significance. The last two letters are *ον*. The two points remaining from the preceding letter can belong only to *μ* or *π*. As the letter was broader than any *π* on the inscription, it must have been *μ*. The part of the first letter still left suggests a rough breathing. There is room at the end of line 10 for *λα* and at the beginning of line 11 for *σ*. Every indication points to *ἡλασμών*. The one polluted by bloodshed, outcast from country, holy places, and the life of society, was restored, when restoration was possible, by two ceremonies. It was Karl Ottfried Müller who first distinguished and explained these rites, the purification, *κάθαρσις* or *καθαρμοῦς*, which cleansed the blood-stain from the criminal, and the propitiation, *ἱλασμός*, which appeased the outraged spirit of the murdered dead.¹ Plutarch mentions the two

¹ K. O. Müller, *Eumenides*, p. 138.

together in describing the purification of Athens by Epimenides, after the slaughter of Cylon's men: *ἱλασμοῖς τισι καὶ καθαρμοῖς καὶ ἰδρύσει κατοργιάσας καὶ καθοσιώσας τὴν πόλιν* (*Sol.* 12).

Of the first line of the inscription nothing certain can be determined.

Line 2. That the first upright stroke (reading the lines in a horizontal position) is the remains of τ is indicated by its distance from the succeeding α . — $\tau\alpha$ seems to be the ending of a masculine participle in the accusative case. The spacing suggests that the third letter was also τ . Of the fifth letter a single upright stroke remains. Its closeness to the σ which precedes and its distance from the α which follows shows that the rest of the letter was to the right of this stroke. It was probably λ of the Corinthian form, Γ . Slight traces on the edge of the break, to the left of α , are, perhaps, relics of the hook, although they may be mere scratches. The \odot represents the spurious diphthong, resulting here from crasis in *τὸ ἐλατήριον*. The word *ἐλαύνω* is frequently used of the driving out of pollution. Cf. *Thuc.* I, 126 and 127; *Aesch. Eum.* 283; *Soph. O.R.* 98. *ἐλατήριον* itself appears in *Aesch. Choeph.* 965. The passage is corrupt, but the associated words are significant.

ὅταν ἄμφ' ἐστίας
μῦσος πᾶν ἐλάσει
καθαρμοῖς ἅπαν ἐλατήριον.

Schütz emended the word to *ἐλατηρίοις* and connected it with *καθαρμοῖς*.

ἀπόβαμ(μ)α is clearly the noun from *ἀποβάπτω*, the double μ being expressed by a single character as frequently in archaic inscriptions.¹ Apollonius of Rhodes, in describing the purification of Jason and Medea after the murder of Absyrtus, tells how Circe killed a suckling pig and sprinkled their hands with the blood. These symbolic stains were then washed away and the water borne out of the house by the attendants.² The

¹ G. Meyer, *Griech. Gram.* § 287.

² *Apoll. Rhod. Arg.* IV, 708.

Attic word for this lustral water was ἀπόνιμμα. Athenaeus (IX, 78, p. 410) says:

Παρέθετο ταῦτα καὶ Δωρόθεος, φάσκων καὶ ἐν τοῖς τῶν Εὐπα-
τριδῶν πατρίοις τάδε γεγράφθαι περὶ τῆς τῶν ἱκετῶν καθάρσεως·
ἔπειτα ἀπονιψάμενος αὐτὸς καὶ οἱ ἄλλοι οἱ σπλαγχνεύοντες ὕδωρ
λαβὼν κάθαιρε, ἀπόνιζε τὸ αἷμα τοῦ καθαιρομένου καὶ μετὰ τὸ
ἀπόνιμμα ἀνακινήσας εἰς ταῦτ' ἔγχυε.¹

Evidently ἀπόβαμ(μ)α has the same meaning — τὸ ἐλατήριον
ἀπόβαμ(μ)α, the lustral water that drives out the guilty stain.

Line 4. The upright stroke faintly visible to the left of ε, the third letter, cannot be the back of ε, as it is joined to the preceding letter. This letter is therefore σ and the back of ε is obliterated.

Line 5. Like φρέξαντα is the aorist ἔφρεξα of a Cypriote inscription (*S.G.D.I.* 71). The Gortyna code (x, 30) has the optative φέρξαι. The commendatory expression, αἰνητὸν φρέξαντα, may refer to the person who is declared in the next line μὴ μιαρὸν εἶμεν.

Lines 6 and 7. The restorations are certain from the remains on the stone. ν, at the beginning of line 7, is almost completely lost by a break, but the point of the elbow is still left.

Line 8. The form μηθείς, as well as οὔθείς, becomes common during the fourth century B.C.,¹ but this is the first instance of its appearing previous to that date.

Line 16. A straight line is plainly to be seen at the top of the first letter, which was probably the rough breathing.

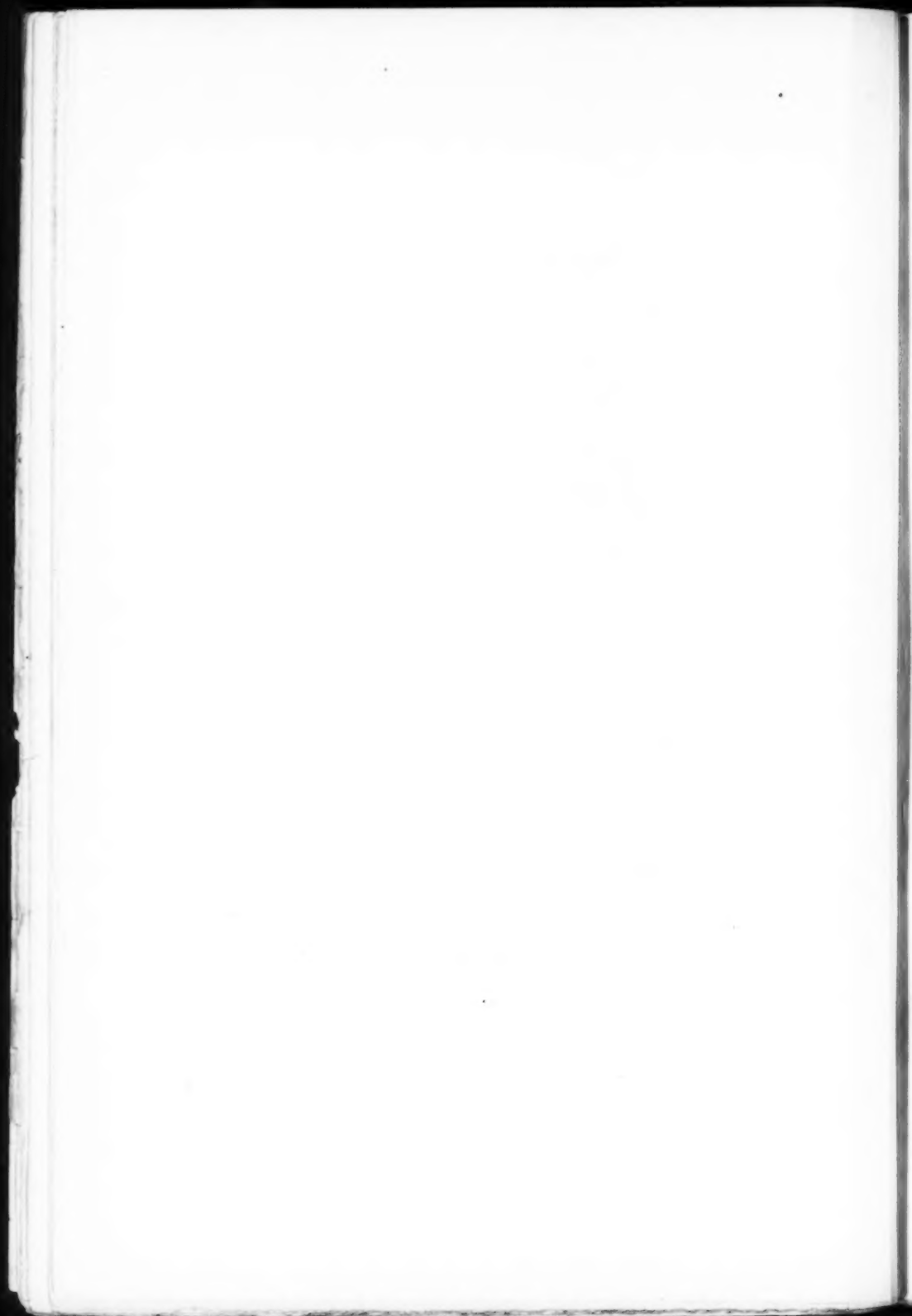
II

The inscription in Fig. 4 was turned up during the excavation at Corinth in April of 1898, on the terrace of the temple of Apollo, about twenty-five meters southeast of its southeast corner, at a depth of something over a meter and a half. The workman's pick broke off the lower corner, mutilating some of the letters. Careful search was made for other fragments, but

¹ G. Meyer, *Griech. Gram.* § 212.



FIGURE 4.—ARCHAIC INSCRIPTION FROM CORINTH.



though in the course of the excavation all the earth from the surrounding area was removed, no additional pieces appeared.

The stone is pale brown poros. One corner only of the original block remains. The present height is 0.25 m.; the breadth, 0.19 m.; the thickness, 0.1 m. The top is uninscribed. The two faces, *A* and *B*, are adjacent, the edge between them being beveled. The upper letters of face *A* form the connecting loop of *boustrophedon* lines, probably of considerable length. Very likely the other two faces of the pillar were also inscribed. Above the first row of letters and between the other rows are still to be seen the faintly incised lines with which the stone-cutter divided his field into strips and guided himself in his work. They continue from one face to the other without a break. The characters are cut deeply and accurately. Their height varies from that of *o*, 0.033 m., to that of *σ*, 0.063 m. The circular letters were made with a compass which has left its mark in the center of *o* in lines 2 and 3. Traces of brilliant red color are still to be seen on *φ*, *o*, and *ι* of line 1.

The ox-yoke *e* in the second line of both faces marks the alphabet as Corinthian, and the crooked *ι*, as well as the *boustrophedon* order, points to the early period of its development. Yet this three-stroke character is not the oldest form of the letter at Corinth. The monument of Deinias (*I.G.A.* 15) and the terra-cotta tablets from Pente Skouphia (*I.G.A.* 20) show a four-stroke variety. The three-stroke form is the one used in the old inscriptions of Coreyra, however (*I.G.A.* 342-344). The position of the letters also is less primitive than on the Deinias monument; for though the two inscriptions are alike in their *boustrophedon* direction and their manner of effecting the turn between lines by a loop of gradually inclined letters, the Deinias inscription inverts the characters in the line reading from left to right.

The transcription is as follows:

A
 ... — αικε — ...
 ... η — ...

B

... φοιν — ...

τέτο]ρες χοῖ[ρ]ο[ι] ...

The first letter on face *A*, of which a single upright stroke remains, was undoubtedly either σ or τ . Fränkel here proposes: $\tau]αὶ κελ[αῖναι]$ (or $\tau]αῖ κελ[αῖναι]$). At the bottom of the stone, 0.08 m. below *h*, the tip of a letter is left. The broken letter beginning the third line of face *B* was probably ρ . Beyond the broken σ , on the edge of the stone, is the square end of a stroke which slanted to the right. The letter was evidently ι .

With regard to the contents of the inscription Fränkel says (*C.I.G.P.* 1597), "continuisse credendus est titulus praecepta de sacrificiis."

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CERTAIN SOURCES OF CORRUPTION IN LATIN
MANUSCRIPTS:

A STUDY BASED UPON TWO MANUSCRIPTS OF LIVY: CODEX
PUTEANUS (FIFTH CENTURY), AND ITS COPY CODEX REGI-
NENSIS 762 (NINTH CENTURY)¹

V. ERRORS OF OMISSION

THE work of the eight scribes is full of omissions. These are for the most part of a trifling nature. The loss is confined chiefly to individual letters, syllables, and small unimportant words. It is rarely that a word of more than one syllable or a group of words has dropped out of the text. These omissions are occasionally the result of intentional emendation, but the majority of them are due to an oversight on the part of the scribe which resulted naturally from the lack of word-division in P. Thus the cause of errors of omission is practically the same as that of the errors illustrated in the two preceding chapters. In the confusion to the eye arising from the unbroken array of letters, it was easy enough for the omission of

tters, syllables, and even words to pass unnoticed. The scribes never more than half grasped the meaning of the sentence which they were copying by reason of a far from perfect knowledge of Latin combined with the added difficulty caused by the lack of word-division in the uncial model. Consequently the failure of the eye to catch a letter was rarely checked by any feeling for the demands of the sense of the passage.

(1) *Haplography*. — We have seen, in the last chapter, that there was an unconscious tendency on the part of the scribes of

¹ Continued from p. 25.

R to regard a letter which stands at the end of a word, or at the beginning of the next, as going with both (Dittography). The opposite tendency is that of Haplography, the omission of one of two like letters, syllables, or words standing side by side. Omissions of this nature are, in the main, unconscious. Sometimes, however, they are the result of conscious emendation. The scribe imagines the repetition to be due to an error of dittography in the original, and omits one of the pair of letters, syllables, or words which he finds written twice.

(a) Examples of the omission of one of two identical letters standing side by side: XXIII, 37, 2 *quia muros satis* per se altos P, *muro satis* per se altos R. *Muros* is here incorrect in P. The ablative is required. But, that there was no intelligence in the change of *muros* to *muro* in R, is shown by the fact that *altos* is left unchanged. — XXVI, 49, 10 *eis praesentibus suos* restituit P, *praesentibus uos* R. — XXIII, 48, 3 *praetorem . . . misit tuerique . . . iussit* P, *misit uerique* R. — XXVII, 41, 9 *quos ubi . . . consul uidet tribuno militum . . . imperat* P, *cōs uide tr. mil.* R. — XXVI, 38, 9 *quo audacior res erat* P, *quo audatiores erat* R. — XXIII, 38, 8 *ceteri superi infernique* di P, *ceteri super infernique* di R. — A double example of this form of error is to be found in the following: XXIII, 34, 5 *ex ceteris nauibus sagittari* (= *sagittarii*) *funditoresque* P, *ex ceteris nauibus agit ari* *funditoresque* R. — Examples of haplography such as *praerant* (= *praeerant*), *uium* (= *uiuum*), *demisi* (= *demissi*), *clasis* (= *classis*), *nolent* (= *nollent*), *adferrent* (= *adferrent*), *misise* (= *misisse*), *pasim* (= *passim*), are quite common in R. But it is difficult to say in any given case whether the omission of one of the double letters within a word is an oversight, or the result of a peculiarity of spelling on the part of a particular scribe.

(b) The same principle operates in the case of the repetition of a syllable, or where two syllables, made up in part of the same letters, stand side by side. The scribe is likely to omit one of them, either through oversight, or intentionally, in the belief that the repetition in P is the result of a dittography

for which the pen of some previous scribe had been responsible. Examples are: XXVIII, 33, 9 *acies esset* P, *aciesset* R. — XXVIII, 25, 2 *gererent* P, *gerent* R. — XXVI, 25, 3 in *pelagioniam eadem celeritate uertit iter* P, *uertiter* R. — XXVI, 28, 2 *legionem inde deduci posse* P, *inde duci* R. — XXVI, 6, 2 *transitum hostibus dedit. ibi, etc., . . .* P, *detibi* R. — XXVI, 33, 12 *qui se dediderunt* P, *qui se dederunt* R.

Repetitions of a word such as are to be found in Plautus and Terence are rare in Livy; consequently there are no examples of the omission of a word through haplography.

(2) The recurrence of the same letter or series of letters in the same line was frequently the cause of the omission of all that was written between them. On glancing back to his uncial original after copying the text as far as the first of the two letters or combination of letters, the scribe's eye often caught sight of the second letter or syllable, and, imagining that this was what he had just written, he went on with his copy from that point, omitting all between. The name usually applied to this variety of omission is *Corruptio ex Homocoteleuto*. Tyrrell (*Correspondence of Cicero*, vol. II, p. 54) suggests *Parablepsy* as a more convenient name.

(a) Omission of one of two adjacent syllables containing the same vowel; e.g. XXIII, 43, 13 *potiturum* P, *potitum* R. The scribe wrote *potitu* and upon glancing back to the page of P his eye caught sight of the second *u*, which he imagined was the one he had just written. [N.B. In the examples the part omitted in R is given in italics in citing the reading of P].

XXIII, 10, 6 *religiosi* P, *reliosi* R. — XXV, 18, 4 *creuerat consuetudo quod aeger romae . . .* P, *creuerat consuetudo deger romae* R. Here the scribe has omitted the *o* of *quod*, and the letters between it and the last *o* of *consuetudo*. — XXVI, 26, 6 *scire se frequentes* P, *scire sequentis* R. — XXVI, 39, 10 *nauali* P, *nali* R. — XXVI, 40, 14 *ad quadraginta* P, *ad quaginta* R. — XXVIII, 30, 7 *sequeretur* P, *sequetur* R. — XXVIII, 31, 3 *rebellione* P, *rellione* R. — XXVIII, 1, 24 *carthaginienses* P, *carthagienses* P. In the two following exam-

ples it is the first syllable which is omitted instead of the second, XXIII, 48, 4 *scipionibus* P, *spionibus* R. — XXVIII, 35, 4 *masinissam* P, *manissam* R.

(b) Sometimes the omission of a whole word in R is caused by the fact that it ended with the same letter or syllable as the preceding one.

XXIII, 48, 2 *claudiana castra* super sessulam P²; *castra* is omitted in R. — XXVI, 27, 8 *comprehensi ipsi* familiaeque eorum P, *compraehensi* familiae quae eorum R. Here the omission of *ipsi* is due to the passing of the scribe's eye from the *si* of *comprehensi* to that of *ipsi*. — XXVIII, 7, 2 *cum primum aestu fraetum inclinatum* est P², *cum primum aestu fraetum* est R, the omission being due to the similar ending *tum*. — XXVIII, 32, 8 *rerum suarum gestarum* P, *rerum suarum* R, *gestarum* being omitted.

(c) In the two examples which follow, this same tendency is responsible for the omission of several words. In XXVIII, 29, 7 *itaque quod ad uniuersos uos attinet, si erroris paenitet*, satis superque poenarum habeo P. The similarity of ending in *attinet* and *paenitet* has caused the omission of *si erroris paenitet* altogether. Also in XXVIII, 21, 5 *si quis miles aut in urbe restitisset aut secum extulisset* P, the words *aut secum extulisset* have been omitted from the same cause.

(3) The largest class of omissions in R is made up of small unimportant words, such as prepositions, conjunctions, pronouns, and the various forms of the verb *esse*. Lindsay in his *Introduction to Latin Textual Emendation* has pointed out the importance of recognizing the tendency to omit these monosyllabic words in emending the texts of the Latin poets, where it is often necessary, in order to reduce a line to metrical regularity, to insert some small word, such as those described above. The reasons for the omission of these small words are various. Sometimes the scribes have, perhaps purposely, left them out in the belief that they were unnecessary, sometimes because they did not understand the context; but in the majority of cases these little words, most of which consist of

but two letters, must have been entirely overlooked by reason of the lack of word-division in P.

[For brevity, in citing examples of this variety of omissions I shall give simply the reading of P, printing in italics the words omitted in R.]

(a) *Prepositions*.—The omission of *ab* (a) and *in* is especially common. XXII, 30, 9 famam a patribus accepissent. — XXIII, 39, 2 productus ad populum a magistratibus. — XXVIII, 1, 20 ceteris ab hannibale interfectis. — XXVI, 39, 8 ut ad componenda armamenta . . . satis temporis esset. — XXII, 41, 5, duas prope partes tironum militum in exercitu esse. — XXIII, 5, 9 coniuratio in tyranni caput facta. — XXV, 19, 15 ut in nulla pari re. — XXVI, 1, 10 ne in oppidis hibernarent. — XXVI, 27, 4 qui in publicum redempta ac manu missi sunt. — XXVI, 28, 4 urbanae duae superioris anni in etruriam . . . mitterentur. — XXVI, 44, 5 trepidatio uero non in proelio maior quam tota urbe fuit. Here the cause for the omission seems to have been that *in* was not written with *tota urbe*. — XXVIII, 26, 14 qualem ne in acie quidem aiebant meminisse. — XXVIII, 34, 12 sustinere ultra nequiere, the scribe apparently not understanding the adverbial use of the preposition.

(b) The conjunctions *et*, *ac*, *aut*, and the enclitic *que* are often omitted, especially when they go in pairs, the scribes regarding one of them as superfluous. XXIII, 46, 9 munimentisquae firmatis et praesidio. The *et* is probably omitted on account of the presence of *que*. — XXIII, 20, 5 blanda et apulorum aece (= Aecae) oppugnatae. — XXVI, 50, 9 pudore et gaudeo. — XXVIII, 24, 6 motae . . . eorum mentes sunt non tum primum . . . sed iam ante licentia ex diutino, ut fit, otio conlecta et non nihil quod in hostico laxius raptu suetis uiuere artiores in pace res erant. — XXVIII, 5, 9 exercitum bolonum (= uolonum) ex etruria in galliam traducit, is an interesting example of the same tendency. Here the scribe of R supposed the *et* of Etruria to be the conjunction, and has left it out, writing *bolonum ex ruria*. — An example like the preced-

ing is to be seen in XXVI, 50, 2. Here P has *inter cetera accepit*, and the scribe of R, supposing *ac* to be the conjunction, and not seeing any possibility of its being used as such, has left it out and written *inter cetera cepit*. — XXIII, 36, 5 *legionem romanam quae exposita panormi est*. Here the *quae* is omitted probably because it was taken for *que*. — XXIII, 48, 5 *nec aliter aut exercitum aut prouinciam atteneri (P²) posse*.

(c) Examples of the omission of pronouns: XXVIII, 6, 5 *qui . . . regium se contulerant* P, *qui . . . regium contulerat* R. The scribe seems to have regarded *regium* as subject of *contulerat*, and has altered the number in addition to the omission of *se*. — XXIII, 9, 9 *praesenti fabio atque ipso comitia habente consulatus continuatus*. The word *ipso* is here omitted apparently because the scribe did not understand its meaning. — XXIII, 14, 8 *liberatis auctorem eis non se fore solum*. — XXII, 25, 19 *seruili eius artis*. — XXIII, 16, 19 *quam pater eius in aventino . . . curauit*.

(d) Omissions of the parts of the verb *esse*, especially of the form *est*, are very common. Examples would probably be superfluous here.

(4) Another cause of omissions was the tendency of the scribes to leave out elements which they did not understand. Where a passage was corrupt in P, not knowing what to do with the corrupt word or words, they sometimes left them out altogether. *E.g.* XXIII, 18, 2 *quae uelut diutinis morbis aegra corpora ex sese gignunt, aea nata bello erant*. Here the scribe of R has omitted the corrupt *aea*. — XXIII, 22, 14 *set strictis simul (corruption of *semel*) gladis (= gladiis) P*. — XXVIII, 27, 10 *nec me uita iuaret* is the reading of *Luchs*; P has *nec multa iuaret*; R has omitted the corrupt *multa* altogether. — XXII, 13, 6 *ab suo itinere Luchs*; *ad sue itinere P*, *a itinere R*.

Sometimes the scribes of R, coming upon an unusual or unfamiliar word, or upon something which in their opinion interfered with the construction of the sentence, left out a

syllable or a word so as to reduce the unknown element to the known. *E.g.* XXIII, 16, 2 *primo antesignani poenorum*, dein *signa perturbata* P; the scribe of R, not being familiar with the word *antesignani*, omitted the *ni*, writing *primo ante signa poenorum*, etc. — XXIII, 37, 9 *praesidio decedere apud romanos capital esse* P; the same scribe (Fredeŕ) in R has left off the *l*, and written *apud romanos capita esse*. — XXVI, 36, 3 *pro uirili parte* P, *pro uiri parte* R; the scribe in dividing the words first saw *uiri* and *parte* and not knowing what to do with the two additional letters left them out. — XXVIII, 4, 1 *animos rursus terror instans* *revocauit* P, *animos rursus terror instare* *uocauit* R; this error seems to be due in the first place to a mental word-division of *instansre uocauit*, and the scribe, supposing *instansre* was meant for the infinitive, omitted the *ns* and wrote *instare*. — XXV, 15, 6 *itaque metapontini* P, *itaque etapontini* R; the omission of the *m* was apparently due to a wrong mental word-division; *itaquem* not being intelligible, it was amended to *itaque*.

Two varieties of errors of omission are treated in other chapters to which they more properly belong: Substitutions such as *aetatis* for *aestatis*, *temporum* for *templorum*, etc., are given in Chapter VII, and the omission of abbreviations in Chapter IX. It is impossible, of course, to account for all of the omissions which occur in R; most of them admit of being grouped under the heads given above, but there still remain omissions which had no apparent reasons or starting-point, and which must be set down as accidents pure and simple.

R exhibits no omissions of any great length. The longest consist, at the most, of not more than three words.

VI. CONFUSION OF LETTERS (IN UNCIAL WRITING)

Another source of error was the tendency on the part of the scribes of R to confuse some of the letters of P, and to write one in the place of another. This species of error is not entirely due to similarity of the letters, but is encouraged to a consider-

able extent by the lack of word-division in P, which, as in the preceding chapters, is again partly responsible for scribal errors. Certain uncial letters possess in common an element of likeness sufficient to make it possible for the form of one letter to suggest the other; and the illusion, since it is not checked by any grouping of the letters into words, often finds corroboration in possible word-divisions other than those intended by Livy.

The letters liable to confusion in uncial writing of the fifth century may be arranged in groups, on the basis of some common element of similarity among them; and in classifying the examples it has seemed best to make this the basis, rather than to follow the alphabetical order. These groups are (1) the letters **l l l** (*ILT*), (2) **cego** (*CEGO*), (3) **brpfk** (*BRPFK*), and (4) a few individual letters outside of these groups.¹

The errors in each group are not evenly distributed over the work of all the eight scribes of R. Aldo, for instance, is prone to the confusion of **l l l** (*ILT*) to a much greater extent than the rest of the scribes, and the majority of the confusions of the curved letters **cego** (*CEGO*) are made by the scribes Fredeğ and Nauto. I have therefore indicated in parentheses, after each error, the name of the scribe by whom it was made, as follows: (G.) = Gislarius, (Ald.) = Aldo, (F.) = Fredeğ, (N.) = Nauto, (Theog.) = Theogrimmus, (Theod.) = Theodegrimmus, (Ans.) = Ansoaldus, (L.) = Landemarus. During a visit to Paris, in 1896, I made a study of the *Puteanus*, with regard to the form of the letters confused by the scribes of R in the greater number of the examples given in the following lists. It was thus possible to see in each case exactly how the error was made; and

¹ I have here attempted to reproduce the normal forms of the uncial letters which were confused by the scribes of R. Confusion is, however, often encouraged, not so much by the normal form of a letter, as by some variation in it. It is also sometimes caused by the illusion which a given letter creates when taken in conjunction with certain other letters. In such cases the possibilities of confusion will be seen to better advantage by consulting the facsimile of the *Puteanus* on p. 165 (Fig. 1).

BENEQUANTIBUS BELLUM
 INCENTIS CLORIXE PRÆ
 DE QUÆ FUTURUM IN
 CIPARIUS
 OMNIBUS FEREUSEN DI
 DOMOS OB LAULI PROPO
 TESTAS GRÆXIA ERAT ETIAM
 DESIDERANTIBUS SUOS
 ET LONGIUS IN FUTURUM
 PROVIDENTIBUS DESIDERIUM
 PERTOTUM TEMPUŠ HIERI
 QUIES INTER LABORES AUT
 ETIAM EXHAUSTOS AUT IMOX
 EXHAURIENDOS RENOUA

INFERENDUM AD QUÆ
 CENDUM BELLUM IN EDU
 IPSE ET RESTRIPTER HIS
 PANIAM CALLIAMISQUE
 ITINERETIAM IMPETE
 RETNUDAM PERIAXQUE
 ROMANIS AFRI CA ABISI
 CILIA ESS ET ULIDOPRX
 SIDIO FIRMA REDEM
 STATUIT PRO EOS SUPPLE
 MENTUM IMPERII AFRI
 CAM MAXIME IN ACULTIO
 RUM LEVIUM MAXIMIS
 TITUTATIBUS IN HIS PA

FIGURE 1.—CODEX PUTEANUS: FACSIMILE OF THE UPPER PART OF A FOLIO (LAVY, XXI, 21, 6 *seql.*).

in consequence I have omitted a few cases of apparent confusion of letters which might be attributed to peculiarities of spelling on the part of the individual scribe. In the lists of examples I have given only the original error of the scribe, omitting the corrections afterwards made by the scribe himself or correctors.

(1) *Confusion of the Letters* } } **l** (*ILT*).—In each of the letters of this group the characteristic element is the vertical stroke. The horizontal strokes at the top of **l** and at the bottom of **l** are short, and not very marked; consequently there is little to distinguish the letters. Confusions in this group form the largest class of errors of this sort, and are especially common in the work of the scribes Aldo and Theodegrimnus.

l (*IL*). XXII, 12, 4 uulo P¹, u/lo P², u/lo R. The letter *l*, which was written above the second *u* of P as a correction, was mistaken for *i* (Ald.).—XXVIII, 38, 4 aediles *pl.* essent P, aediles *pi.* essent R (L.).—Where *i* is initial, owing to the fact that in Caroline minuscule writing initial *i* is often almost undistinguishable from *l*, it is sometimes scarcely possible to tell whether the scribes of R intended to write an *i* or an *l*, *e.g.* whether R has in XXII, 39, 7 *lactando* or *iactando* (Ald.), and in XXII, 27, 4 *ludicio* or *iudicio* (Ald.).

(*LI*). XXII, 60, 11 *calpurnius* P, *cai purnius* R (Ald.).—XXIII, 9, 9 *conspicitur* P¹, *conplectitur* P²; the scribe Aldo misunderstood the correction in P, and, mistaking for an *i* the *l* placed above the P, wrote *coniectitur*.—XXIII, 14, 5 *notalum* P¹, *no/anum* P², *no/anum* R (Ald.).—XXVI, 38, 13 *ad ultimum* P, *ad u/itumum* R (Theod.).

l (*IT*). XXIII, 12, 11 *iactauit* P; *tactauit* was first written in R (Ald.).—XXII, 60, 23 *uirib.* (= *uiribus*) P, *utrib.* R (Ald.).—XXVI, 39, 11 *ui ac uirtute* P, *ut ac uirtute* R (Theod.).—XXIV, 20, 15 *heraclensi*

(= Heracleensi) iam P; heraclestiam was first written in R (F.).—XXVI, 51, 4 quinto iterum P; quintot was first written in R, then *t* erased and iterum written after the erasure (Theod.).

(*TI*). XXVI, 41, 6 ut ultro P, uī ultro R (Theod.).—XXII, 30, 7 utro P, uīro R (Ald.).—XXVI, 39, 12 ex utraque P, ex uīraque R (Theod.).—XXVI, 3, 2 pugna ut P, pugnaui R (Theod.).—XXVI, 35, 10 tuta P, iuta R (Theod.).—XXVI, 30, 3 factam P, faciam R (Theod.).—XXIII, 20, 14–15 mouit tum P, mouitium R (F.).—XXIII, 3, 6 strenum (= strenuum) P, sirenum R (Ald.).—XXIII, 11, 4 ture ac uino P, iure ac uino R (Ald.).

II (*L T*). XXII, 38, 13 celeribus P, ceteribus R (Ald.).—XXVIII, 14, 3 iunonis sospitae lanuuii P, iunonis sospitae tanuuii R (L.).—XXIII, 15, 5 nolam P, notam R (Ald.). With this compare the example given already under confusions of *L* and *I*, noianum for nolanum, XXIII, 14, 5.

(*T L*). XXIII, 19, 5 cū cetero exercitu P, cū celero exercitu R (F.). With this example compare *ceteribus* for *celeribus* in the preceding class.—XXV, 18, 1 terrifi P, terrii was first written in R (N.).—XXII, 30, 8 itala corrected to italia P¹; italia was first written by Aldo.

In the following examples there is a double confusion of *L T* and *TI*, and of *TI* and *IT*: XXII, 22, 14 uolt P, uoti R (Ald.).—XXV, 19, 5 reductique P, reducitque R (N.).

In Heraeus (*Quaestiones Criticae et Palaeographicae de Vetus-tissimis Codicibus Livianis*) will be found numerous examples of the confusion of pairs of these letters with *U*. Of this confusion I have found in R but one tolerably certain example, the confusion of *IL* and *U*. XXIII, 7, 12 m. aemilium regillum P, m. aemilium regulum R (F.). The reason for the scarcity of examples of this form of confusion in R is due to the fact that the left-hand stroke of the letter *u* in P is gen-

erally curved thus, **u**, and where *u* is confused with other letters it is with those in the *C G E O* group.

There are rare examples to be found in R of the confusion of the letters *ITL* with other letters. For instance, the letters *P* and *E*, when the loop of the one and the horizontal strokes of the other are small and light, may be mistaken for *I* in hasty reading.

f i (*FI*). XXIII, 7, 9 *factum P*, *iactum R* (Ald.).

p i (*PI*). XXIII, 43, 5 *muneribus amplis P*, *muneribus amilis R* (F.).

c t (*CT*). An example of a possible confusion of *C* and *T* is the following: XXIII, 13, 5 *dicā P*, *ditam R* (Ald.), though there is really little similarity between the letters.

c l (*CL*). *C* is written in the place of *L* in the following example: XXIII, 3, 6 *locum P*, *coē* corrected to *locū R* (Ald.); but this is probably due to the fact that the scribe began to write the second syllable first, an error which has happened before in the case of this scribe, e.g. XXII, 60, 21 *incolumitate P*², in *locumitate R*.

(2) *Confusion of the Letters c e g o u (C E G O U).*—

The element of similarity among these five letters is that, in uncial writing, *C E G* and the left-hand stroke of the *U* were formed by the arc of a circle, while *O*, though a circle, was usually made in two strokes, the left-hand stroke being usually heavier than the right. Each of these letters, then, contains a curve, the convex part of which is turned toward the left, and, if the other strokes are light or indistinct, confusion is an easy matter. A letter which might belong to this group is **δ** (*D*),¹ which is capable of being confused with *O*, but I have found no example of this confusion in the work of the scribes of R.

¹ Examples of the confusion of **δ** and **ο** are given by Lindsay (*Lat. Text. Emend.* p. 103), Heraeus (*de Vet. Cod. Liv.* p. 103).

CE (*CE*). Here confusion is very common; the only difference between the letters is the horizontal stroke of the *E*, which was usually written quite high. Examples: XXV, 12, 14 in *circo maximo* P, in *circo maximo* R (N.).—XXV, 16, 17 id *cohonestent* P, *ideo honestent* R (N.).—XXV, 17, 6 memorant *credere* P; memorante was first written by Nauto, who first mistook the *c* for an *e*.—XXIII, 43, 13 *capuae ac* P; *capuae ae* was first written in R (F.).

(*EC*). XXIII, 47, 1 *liceretne extra* P, *liceret neextra* R (F.).

CS (*CG*). The confusion between these two letters is particularly easy. The only difference between them is the slight curve downward at the lower end of the stroke in the case of *G*. Examples: XXIII, 5, 13 *ex afri|ca* et a *earthagine* P; *ex afriga* was first written in R (Ald.).—XXV, 12, 10 *graeco ritu* P, *graegoritu* R (N.).—XXVIII, 23, 8 *foedere cum populo* P, *foede regum populo* R (L.).

(*GC*). XXII, 11, 4 *dimigrarent* (= *demigrarent*) P, *dimirarent* R (G.).—XXIII, 3, 9 *datae igitur* P², *data eicitur* R (Ald.).—XXIII, 7, 7 *negasset se iturum* P, *necasset se iturum* R (Ald.).—XXII, 22, 9 *adgreditur castra* *Luchs*, *adgredituricastra* P, *adcreditu|ricastra* R (Ald.).—XXVI, 6, 1 *coepit* *Luchs*, *coegit* P, *coecit* R (Theog.).—XXVI, 3, 4 *non ag|mine inexplorato* P, *non ae mine inexplorato* R (Theog.).—XXVIII, 7, 10 *agmen suorum* P, *ae mensuorum* R (L.).

EO (*EO*). This confusion is not recognized by either Lindsay or Heraeus. The examples given below show that such a confusion was possible; and indeed there is considerable similarity in the letters, if *O* is made with the heavier stroke on the left curve of the letter, and the horizontal stroke of the *E* is written high or is somewhat faint.

Examples: XXVI, 50, 4 *iuenis*, inquit, *iuenem* appello P, *iuenis* inquit *iuenem* apollo R (Theod.). — XXIII, 3, 14 cum permissu hannonis arcem intrassent *Luchs*; P has for the last two words *arcem* *inistrassent*, and *arcom* *inistrassent* was first written in R (F.). — XXIII, 8, 9 *deceat* P, *doceat* R (F.). — XXV, 21, 2 *ferociter* P, *forociter* R (N.). — XXIII, 20, 16 *greges maxime abacti* P, *greges maximo abacti* R (F.).

(*O E*). Examples of the opposite confusion are: XXIII, 9, 10 *tuam* | *doleo uicem* P, *tuam deleo uicem* R (Ald.). — XXIII, 42, 2 *poterant* P, *peterant* R (F.). — XXVI, 6, 1 in *ipso* | *uallo conficiunt* P, in *ipse uallo conficiunt* R (Theog.).

OU (*OU*). In the case of the substitution of one of these letters for the other, it is often extremely hard to decide whether the confusion is due to peculiarities of spelling and pronunciation on the part of the individual scribe, or is really a confusion of the form of the letters. Thus *furtuna* (= *fortuna*), *uicture* (= *victore*), *incolumi* (= *incolumi*), *luxoria* (= *luxuria*), *expugnatoros* (= *expugnatueros*), *syracosanos*, *sicolorum*, are probably due to individual habits of spelling and pronunciation. There are cases, however, where the change of letter makes a change of sense, and the errors are therefore to be attributed rather to a confusion of the form of the letters than of the sound.

Examples: XXIII, 5, 12 *docendo* P, *ducendo* R (Ald.). — XXVIII, 29, 11 *adeo torpentibus qui aderant* P, *adeotur pentib; qui adorant* R¹ (Ans.). Here the confusion is double, that of *OU* and of *EO*. — XXIII, 19, 6 *tolerantes* P, *tulerantes* R (Ald.). — XXIII, 40, 8 *populatione* P, *pupulatione* R¹.

(*U O*). XXII, 12, 8 *ducebat* P, *docebat* R (G.). — XXII, 60, 10 in *tuta loca* P, in *tota loca* R (Ald.). — XXVI,

37, 5 imperium P; imperi^om was first written in R (Ald.). This is probably not a case of archaizing the spelling, for the reason that such forms ending in *om* which occur in P are regularly changed to *um* by the scribes of R. — XXVI, 16, 12 murosque P, mōros que R (Theod.). — XXVI, 16, 6 muris P, mōris R (Theod.).

To the similarity of these two letters must be ascribed, in part at least, the writing of the accusative plural masculine instead of the nominative singular (and *vice versa*), in words of the second declension, where there is nothing in the structure of the sentence or in the sense of the passage to warrant the error.¹ Examples: XXIII, 19, 18 subiectus P, subiectos R (Ald.). — XXIII, 20, 5 legatos P, legatus R (Ald.). — XXVI, 5, 14 interclusos P, interclusus R (Theod.). — XXVI, 40, 8 romanos P, romanus R (L.). — XXVIII, 12, 2, infensos P, infensus R (F.).

In the following examples of very exceptional confusions in this group I shall give more of the context, for the reason that there is but one example of each.

Gu (*GU*). XXIII, 7, 9 ab universis id non oboedienter modo sed enixae (= enixe) fauore etiam uolgi et studio uisendi tot iam uictoriis clarum imperatorem factum est P. Here, where P has uolgi, R has uolui. There is nothing in the context to suggest uolui, and it must be regarded as an example of confusion of letters.

Eu (*EU*). XXII, 60, 25 cum aciae (in acie *Luchs*) stare ac pugnare decuerit P; here R has *duerit*. The error may possibly have been encouraged by the occurrence of *u* in the next syllable.

¹ Examples of confusion of these case-endings, due to a mistaken idea of the syntax of the sentence, will be found in the chapter on Errors of Emendation.

CU (*CU*). XXVIII, 18, 1 unum est, de quo nominatim et nos quaeri (= queri) religio infixa animos (animis *Luchs*) cogat, etc., P; here R has *uocat*, which involves a double confusion, namely, of *CU* and *GC*.

(3) *Confusion of the Letters BPRFK* (*BPRFK*).—These letters are all formed by means of a vertical stroke with loops (as in *BPR*) or straight lines (as in *FK*) drawn to the right. If these lines to the right are lightly made, the letters may sometimes be confused in rapid reading, though not so readily as the letters in the two preceding groups.

BP (*BP*). These two letters were also sometimes confused in pronunciation. It is therefore difficult to be certain, in a given instance, whether the substitution of one for the other is due to that cause or to confusion of form in cases in which *P* is followed closely by some other letter which helps the illusion. Examples: XXII, 28, 9 *pellendos* P, *bellendos* R (Ald.).—XXIII, 12, 6 *barcinae* P, *parcinae* R (Ald.).—XXIII, 18, 12 *blandius* P, *plandius* R (Ald.). In this example and the preceding one the words in P were divided by the end of a line. It is therefore hardly probable that the error is the result of wrong mental pronunciation, which would have been checked by the break in the words.—XXV, 11, 1 *rupib*; P, *rubib*: R (N.).

BR (*BR*). XXII, 9, 2 *temptate uirib*; P, *temptate quib*; was first written in R, the *r* being taken for a *b* and the *q* unconsciously inserted (G.).

FP (*FP*). XXVI, 6, 6 *defen|di* P, *dependi* R (Theog.).

FR (*FR*). This confusion is made possible where the letter following *F* is one of the curved letters. XXIII, 17, 5 *adfuere* P, *adruere* R (F.).

PR (*PR*). This confusion, also, is made possible where the letter following *P* is one of the curved letters *CEGOU*.

XXV, 13, 7 apparatu pe|tendum P, apparaturae tendum R (N.).

(RP). Of the converse of this form of error there are no examples of whole words, but in the following examples *p* was written for *r* and immediately erased: XXIII, 9, 13 minus *res* P; after minus the scribe Aldo wrote a *p* and then erased it. — XXIV, 33, 9 terrore P; the first four letters written by the scribe of R were *terp* (F.).

R K (RK). XXVIII, 12, 8 epiroe (Epirotae *Luchs*) P, epi Koe R (L.).

(4) *Other Letters liable to Confusion.*

X X (AX). The only sure example of this confusion is XXVIII, 3, 11 patienda *ea* robore P, patienda *ex* robore R (L.).

R N (RN). When *R* is written close to the next letter and has the loop at the top very small (under which circumstances *RI* might sometimes suggest *N*), it is possible to mistake *R* for *N*, e.g. XXVI, 5, 5 terrore P, terrone R (Theog.).

S S (SG). XXVIII, 19, 12 syracusarum P², syracugarum R (L.). A similar example is to be found in P which in XXIII, 39, 3 had *cos non* for *cognomen*.

P S (PS). The letter *P*, when the loop is large and not closed, sometimes bears a slight resemblance to an *S*, e.g. XXIII, 17, 2 publica P, sublica R (Ald.).

IN M (IN, M). XXVIII, 30, 2 deinde P, demde R (Ans.). — XXVIII, 30, 10 intorta *in* proram P, intortam proram R (Ans.). This confusion is probably due not to any similarity between *IN* and *M* in uncial writing, but the **M** unconsciously suggests the *IN* of the Caroline times.

The following confusions, represented in the above examples, are not given in the lists of confusions in Lindsay's *Introduction to Latin Textual Emendation* or Heraeus's *Quaestiones Criticae et Palaeographicae*: *FI*; *PI*; *CL*; *EO*; *OU*; *GU*; *EU*; *CU*; *BP*; *FR*; *RK*; *RN*; *PS*; *IN*, *M*. Of these the confusion of *EO* is represented by eight examples; that of *OU*, by five; that of *BP*, by two that are fairly certain; and that of *IN*, *M*, by two. The others are represented by but a single example each. With the exception of *CL* they are all undoubtedly *bona fide* confusions.

On the other hand, the combined lists of Heraeus and Lindsay contain the following confusions not represented in the above examples: *AD*; *B*, *IS*; *CO*; *DO*; *DS*; *FS*; *FP*; *GE*; *GO*; *H* with *N*, *LI*, *EL*, *EL*; *M* with *N*, *NI*, *NT*; *U* with *IT*, *TI*, *CI*.

VII. CONFUSION OF SIMILAR WORDS

When one is reading rapidly, even a well-printed book, it is not an uncommon thing unconsciously to substitute one of two similar words for the other, *e.g.* *statue*, *statute*. The letters of a word present themselves not individually, but as a group. When two words differ from each other merely by a letter or two, it is very easy, unless one is reading carefully, for one group of letters to suggest the other.

Naturally, in copying a manuscript such as P, the tendency to confuse similar words was greatly increased by the lack of word-division. In printed books, and in manuscripts in which the words are divided, the separation of the words leaves comparatively little chance for errors of the eye. In copying the continuously written text, on the other hand, the grouping of the letters had to be done entirely by the copyist. The work of the scribes of R was, moreover, almost mechanical, and they but rarely grasped the meaning of a sentence as a whole. There was, therefore, little to check these frequent illusions of the eye or to call the scribe's attention to the error after it was

made. Consequently the unconscious substitution of one word for another is one of the more common forms of error in their work.

In the following list of examples I have given only such substitutions of similar words as seem to be unconscious or accidental. Intentional substitutions will be treated in the Chapter on Conscious Emendation; confusions due to habits of spelling and pronunciation will be treated of in the Chapter on Errors of Spelling; and substitutions, such as *uiro* for *utro*, have been given in the preceding Chapter on Confusion of Letters.

Examples of confusion of similar words: XXIII, 48, 4 exitus (exitu *Luchs*) *aestatis* eius P, *aetatis* R. — XXIII, 42, 5 ita sumus aliquotiens hac *aestate* deuastati P, *aetate* R¹. — XXVIII, 37, 7 ei *aetas* in medio uirum robore P, *aestas* R. — XXVI, 29, 2 et *exemplo* oculos hominum conuerterint P, *exemplo* R. — XXIII, 14, 9 pugnam posebant, signumque ut daret *exemplo* P, *exemplo* R. — XXII, 32, 6 auri . . . ad *templorum* ornatum P, *temporum* R. — XXV, 12, 7 nam mihi ita iuppiter *fatus* est P, *factus* R. — XXV, 16, 4 nulla tamen prouidentia *fatum* imminens moueri potuit P, *factum* R. — XXV, 39, 14 ualerius antias una castra magonis *capta* tradidit (tradit *Luchs*) P, *capita* R. — XXVI, 35, 6 equi ornamenta et *libras* pondo P, *liberas* R. — XXVI, 37, 8 quo *propius* spe (spem *Luchs*) uenerant P, *proprius* R. This error was copied into M. — XXVI, 40, 8 ubi primum hostium agmen conspexisset P, *urbi* R. — XXVIII, 23, 5 *ferro* ignique P, *ferre* R. — XXVI, 41, 6 id *parem* (parem *Luchs*) atque agamus P, *patrem* R. This error was copied into M. — XXVI, 41, 12 siciliae maioris *partis* P, *patris* was first written in R. — XXVI, 28, 6 capua prouincia *decreta* P, *decreata* R. — XXVI, 34, 2 *operae* praetium (pretium) est omnia enumerare P, *opere* R. This may, of course, be due to spelling. — XXVIII, 24, 12 reprehendere adque *improbare* P, *improbrare* R. — XXIII, 45, 6 arma signaque eadem se *noscere* P; *nocere* was first written in R. — XXII, 39, 20 omnia *audentem* con-

temnet P, *audientem* R. — XXII, 25, 8 tamquam hostibus captiuis arma *adempta* P, *adepta* R. — XXII, 18, 7 dictator in larinati agro castra *communiit* P, *commonuit* R. — XXVII, 41, 10 ut sterni *opterique*, priusquam instruantur, possint P, *optineri quae* R¹. — XXVI, 51, 3 ipse paucos dies . . . *exercendis* naualibus pedestribusque copiis absumpsit P, *exarcendis* R. — XXVII, 42, 1 itaque *excitus tumultu* P, *exercitus tumultum* R. — XXV, 13, 7 *que* (= *quae*) *mutas* accenderet bestias P, *multas* R. — XXVI, 2, 3 melius uisum differri eam *consultationem* P, *consulationem* R. The error is repeated, three lines farther on, where P had *consultationi* and R *consulatione*. — XXVIII, 16, 7 *rogare* P, *rogate* R¹. — XXVI, 36, 3 plus quam pro uirile parte sibi quemque capere *principum* uident P, *principium* R. — XXIII, 46, 6 ad marcellum *transfugerunt* P, *transfuerunt* R. — XXIII, 40, 7 *manlius* P, *manilius* R. — XXIII, 37, 5 ut eo die *obsesso* quam obsidenti similior esset poenus P, *obsessio* R. — XXVI, 39, 22 paucos ex multis *incidentis* semiapertis portarum foribus P, *incedentis* R. — XXV, 13, 7 paulo plus quadringenta uehicula *missa et* pauca praeterea iumenta P, *missa est* R. — XXII, 34, 2 *quem* sui generis hominem P, *quam* R. — XXVI, 49, 16 *ne* in malis P, *nec* R. — XXVI, 42, 1 *ad* hostem P, *ab* hostem R. — XXV, 39, 9 *ab* recenti pugna P, *ad* R. This error was copied into M. The confusion of these two prepositions, *ab* and *ad*, is very common.

Examples of the substitution of one group of words for another have been already given in Chapter III.

VIII. CORRUPTIONS ARISING FROM MISTAKING THE NUMERAL SIGNS¹

Bede, in speaking of the work of the scribes of his own day, made the following complaint: "numeri . . . negligenter describuntur et negligentius emendantur" (*Opp.* 1, 149). The fre-

¹ The material contained in this chapter formed the subject of a paper read before the American Philological Association at the meeting held in Schenectady in 1902, and published in vol. XXXIII of the *Transactions* of that Association.

quent occurrence in manuscripts of the ninth century, or later, of numerical records which are evidently corrupt seems to indicate that his complaint was not without foundation. Inasmuch as the scriptorium of Tours may be taken as typical of the scriptoria of western Europe in the ninth century, it is of interest to see how the numbers in Livy's history, as given in P, fared in the hands of the monk-copyists of R. A comparison of the readings of the two manuscripts makes it possible to examine in detail the errors made by the scribes of R, and to see exactly in each case the reason for the error.

Even the complaint of Bede hardly prepares one for the extensive corruption of numbers which took place in this one process of transcription. My study of R, as I have already said, covered about one-half of the portion copied by each scribe, an amount equal to about half of the third decade. Within this compass there were, in all, thirty-two cases of corruption involving numbers; and were it not for the fact that in P many of the numbers are not represented by symbols, but are expressed in full, corruptions of this nature would have been much more numerous. These corruptions are due not so much to carelessness on the part of the scribes, as might be inferred from the complaint of Bede, as to ignorance of certain of the numerical signs and methods of notation which, although in vogue in the fifth century, had in the ninth become partially obsolete. The real carelessness of the scribe consisted in attempting to render in the notation of his own day the symbols which he did not understand. Fortunately, the more difficult symbols for the higher numbers, such as 𐌂 , 𐌃 , do not occur in P, and the scribes' difficulties were confined to the symbols for 1000 and those of lesser denominations.

(1) In P the sign regularly used for 1000 is ∞ . This symbol seems to have been entirely unfamiliar to the scribes of the early ninth century, and to this cause is due fully one-half of the numeral corruptions in the following list. The possibility of error might have been avoided by copying the symbol as it stood, but four of the scribes—Aldo, Fredegandus,

Ansoaldus, and Landemarus—made the absurd blunder of supposing that ∞ , from its form, must stand for x, even where the context showed that 10 was entirely too small a number. For instance, the scribe Fredegaudus, in XXIII, 37, 6, has transcribed correctly enough the number ∞ ccc, but only a page or two later, meeting with the symbol ∞ again (in XXIII, 40, 2), he imagined that he now knew what it meant, and wrote, instead of the ∞ cc which he found in P, the number xcc. If he had exercised a moment's thought, he might have seen that it was not at all likely that ∞ was the symbol for 10, inasmuch as it was followed by cc; yet he continued to make the same mistake throughout his quota of the work, though once, being in doubt, he left a blank to be filled in by the corrector. Other examples of his treatment of the symbol are:

XXIII, 40, 4 ad $\infty\infty\infty$ sardorum eo proelio caesa P. Here Fredegaudus first wrote xxx; then, feeling that 30 was too small a number, he drew a horizontal stroke above it, thus, xxx̄. In this way the original 3000 becomes first 30 and then 30,000.

XXIII, 49, 11 paulo minus ∞ equorum P. In R a corrector has written ∞ in an erasure of what was probably x.

XXIII, 40, 5 in ualerius $\infty\infty$ praesidioque P. Here the scribe left a blank space, in which the numeral was written by a corrector.

XXIII, 40, 8 facturum se que (= quae) uellent pollicitus, $\infty\infty$ delectorum militum navibus longis mittit P. The number as it now stands in R is ∞ *delectorum militum*, but the ∞ is written by a corrector in an erasure of what was probably xx. It is to be noted that the correction is also wrong, and that the scribe has returned to writing x for ∞ .

The above examples from the work of Fredegaudus I have given first, not because his errors in this regard are the most numerous, but because they show four different stages in his treatment of the symbol: (1) he does not know what it means, but copies it as it stands in P; (2) he becomes convinced that it stands for x, and writes it accordingly; (3) he begins to

doubt his previous conviction, and leaves a blank; (4) he resumes once more the writing of x . Examples of this error from the portions copied by the other scribes are:

XXVII, 38, 11 equitum ∞ P. This the scribe of R copied correctly, but, having changed his mind, he erased the ∞ and wrote x in its place.

XXVII, 38, 12 et sagittariorum funditorumque ad $\infty\infty\infty$ P, et sagittariorum funditorumque xxx R. This a corrector has altered to $\infty\infty\infty$.

XXVII, 43, 11 sex millia peditum ∞ equites P, sex millia peditum x equites R.

XXVIII, 2, 4 erant in celtibero exercitu $\infty\infty\infty$ scutata P, erant in celtibero exercitu xxxx scuta R.

XXVIII, 34, 2 uulnerata amplius $\infty\infty\infty$ hominum P, uulnerata amplius xxx hominum R. In this and in other cases the genitive after the numeral does not seem to have troubled the scribe.

XXVIII, 36, 9 supra $\infty\infty\infty$ armatorum P, supra xxxx armatorum R.

XXII, 41, 2 ad ∞ et dcc caesi P. A corrector in R has written m over an erasure of what was probably x .

XXII, 7, 3 is a possible example of this confusion. P has $\infty\infty$ hostium in acie periere. In R there is an erasure before n , in which a late corrector has written m . The erased letters were probably xx , as the work of this scribe, Aldo, shows other instances of this confusion. There is a possibility, however, that the letters were $\infty\infty$, and that this correction was a deliberate one, made with the purpose of bringing Livy into harmony with Polybius, who gives 1500 as the number.

In the two examples which follow, as well as in the second example from the work of Fredegaudus, this confusion of x and ∞ is responsible for a further increment of corruption.

XXVII, 40, 11 ad $\infty\infty\infty$ hominum P, ad *triginta milium* hominum R. Here the scribe has made a triple error. He interpreted the $\infty\infty\infty$ as xxxx. Then, being in the habit of writing XL for 40, he supposed that the fourth ∞ was a

scribal error and that 30 was the number. Feeling that the passage required a larger number than 30, he wrote *ad triginta milium hominum*, and the 4000 of Livy has become 30,000.

XXIII, 13, 7 ut hannibali ∞ ∞ numidarum in supplementum mitterentur. R has XL numidarum. The scribe supposed that the number was XXXX, and was in the habit of writing XL for 40. As in the preceding example, the clue for emendation is practically lost.

(2) The symbol for 1000 with which the scribes were familiar was M. Consequently the scribes Theogrimmus and Theodegrimmus sometimes write *mille* for M., the abbreviation for *Marcus*, and a number is thereby created where none had existed.

XXVI, 21, 13 id \bar{m} cornelio mandatum P, id *mille* cornelio mandatum R. To the scribe, if he took the trouble to translate, this must have meant, "This thousand was entrusted to Cornelius."

XXVI, 21, 17 inter has difficultates m cornelius PR (= praetor) et militum animos, etc. P, inter has difficultates *mille* cornelius populus romanus et militum animos R. That the scribe had little idea of the sense is shown by *populus Romanus*; but if he concerned himself with the meaning at all, he must have taken it to mean something like this: "amid these thousand difficulties."

XXVI, 22, 12 duobus plenis iam honorum que fabio et \bar{m} marcello P, que fabio et *mille* marcello R.

XXVI, 21, 5 ut \bar{m} . marco marcello (marco marcello P², deleting \bar{m} .) quo die urbe ouans iniret, imperium esset P, *mille* marco marcello R. The scribe has not only produced an utter absurdity, but has gone out of his way to do so by disregarding the correction in P.

XXVI, 40, 10 ad p. tolomaeum (= ad Ptolomaeum) et cleopatram reges \bar{m} atilius et \bar{m} acilii legati P, ad populum tolo-maeum et cleopatram reges \bar{m} atilius et milia acilii legati R.

Here the scribe arbitrarily left one \overline{m} as it was and wrote *milia* for the other.

These errors were all corrected while P was still accessible, and are so absurd that, if P had been lost altogether, they would, if not carried further, have presented no difficulty whatever to a modern critic. But these blunders would surely have grown in passing through the hands of later copyists, to whom it would be a great temptation, on finding these numbers standing alone, to add a noun to indicate the thing numbered.

(3) The symbol D , for 500, also gave rise to an important class of corruptions in R. In order to distinguish the numeral sign from the letter D , a stroke is regularly drawn through it in P. Unfortunately an oblique stroke was drawn in the same way, by the correctors in P, through letters which they wished to delete; and some of the scribes of R, supposing that this was the purpose of the oblique stroke through the D , have omitted the symbol for 500 altogether.¹

XXIII, 16, 15 \overline{ii} et Dccc hostium caesos non plus D romanorum amississet (amissis et *Luchs*) P, \overline{ii} et ccc hostium caesos non plus romanorum amisisset R. The number of the enemy's killed has thus decreased from 2800 to 2300, and the number of the Roman dead has disappeared entirely.

XXIII, 19, 17 ex DLXX qui in praesidio fuerunt P, ex LXX qui in praesidio fuerunt R; a reduction from 570 to 70. The scribe added the D at a later time.

XXIII, 17, 8 casilinum eo tempore D praenestini habebant P. D was omitted by Aldo, and R first read *casilinum eo tempore praenestini* habebant, though the D was inserted at a later time.

XXVII, 41, 8 circa D romanorum sociorumque uictores ceciderunt P. The number is omitted in R.

The scribe Fredegaudus seems to have regarded this as a

¹ Even as early as the copying of P, in the fifth or sixth century, the omission of D was not unusual, as is shown by its occasional omission in P.

blunder to be carefully guarded against, and in XXIII, 43, 8, where P has *nolandos*, — which was corrected to *nolanos* by P², by drawing a line through the **Δ** (thus, NOLAN~~Δ~~OS), — this scribe wrote *nolan~~Δ~~os*, probably because he had been cautioned against omitting the symbol. This precaution shows how great a tendency there was to errors of this kind.

(4) Another source of error in connection with the numerals was the difference in practice in the fifth century and in the ninth with regard to the manner of writing 40. In P it is regularly written XXXX. In the ninth century the form XL seems to have been the more familiar form. Consequently there is a slight tendency among the scribes of R to suppose that XXXX is a mistake, and that XXX is the number intended. Thus, in XXVII, 40, 11, the scribe in R wrote XXX for ∞∞∞∞, supposing that ∞ was X.

In XXVII, 8, 13, quattuor milia CCCXXXXIV, though written correctly by the scribe of R, has become in the hands of a corrector, who erased one X, quattuor milia CCCXXXVI. And in XXIII, 37, 11, signa militaria ad XXXXI cepit P, became, in the hands of the scribe, XXXI, though a corrector has since emended to XLI.

One would expect to find the same confusion in the case of VIII for 9, but of this I have found no examples.

Manuals on textual emendation have little to say on the subject of the numerals, and the illustrations which they give deal for the most part with corruptions caused by the confusions of the numeral signs with letters of the alphabet, the numeral thereby becoming part of a word. Of this variety of error I have found but two examples:

XXVIII, 36, 9 paulo minus CCC ui|ui capti P. Here the word *uiui* is divided in P by the end of a page, — one half being at the bottom of one page, the other at the top of the next. In consequence, Landemarus supposed that the first *ui* was part of the numeral, and wrote CCCVI ui capti.

XXII, 37, 5 uictoriam auream pondo ducentum ac uiginti is the reading of Luchs. P has uictoriam auream p. cc ac xx. For this the scribe in R wrote uictoriam auream picea cxx. This absurdity is now emended in R to *p. cccxx*. The *a* of *ac* is thus omitted and the *c* is added to the numeral, thereby increasing the weight by 100 pounds.

From the paucity of examples, it would seem that this was not a class of error to which the scribes of R were prone, and the actual corruption due to this cause is slight when compared with the other classes already indicated. The same may be said of the errors arising from the two uses of the horizontal stroke which was drawn above the numerals, sometimes to indicate thousands, and sometimes simply to indicate a numeral. I have found no errors from this cause in R, for the reason that where the horizontal stroke was already in P it was usually reproduced in R, or if omitted, omitted intelligently.

To make the list of numeral corruptions complete, I shall give one more. In XXVIII, 38, 8, P reads *ludi romani biduum instaurati*. Here the scribe Landemarus wrote *ludi romani x duū instaurati*. His reason for writing *x duū* is difficult to see. He may have thought that *-duum* meant 2 in combination with a preceding number, and then guessed that the first part meant 10.

It will be seen from the above examples that the great majority of the numeral corruptions involve the larger numbers. Of a total of 32 examples, there are 15 in which *x* is written for ∞ . If we include the five examples in which *mille* was written for M., the abbreviation for *Marcus*, — which, however, as they occur in the work of but two scribes, must not be regarded as a common species of error, — we have 20 examples, or nearly two-thirds of the total number, involving thousands. Adding the examples of the omission of *ſ*, we have a total of 25 cases of numeral corruptions involving errors of 500 or more. The total number of numeral corruptions due to all other causes amounts to but 7. The smallest class is that to which books on textual criticism give the most attention.

The havoc made with the numerals in this one process of transcription goes to show how little reliance can be placed upon the accuracy of the numerals in the texts of classical Latin writers which are based only on manuscripts of the ninth century or later. The chief cause of error in R is the scribes' lack of familiarity with the signs of notation in vogue in the fifth and sixth centuries. The monastery of Tours was surely no exception in this respect, and it is safe to assume the same ignorance of the older notation for the majority of the scribes in western Europe in the early ninth century. It is therefore probable that errors of the same nature continued to be made until experience had given the scribes more familiarity with the notation of the older time. Most of the errors in R passed through the hands of a corrector, in which process some of them were corrected, and others augmented. But that such supervision was not extended to all the manuscripts of the period is shown by the occurrence of similar errors in the *Bambergensis*, an eleventh-century descendant of P. In the few chapters at the end of the decade, in which the readings of the *Bambergensis* appear in the critical apparatus, there are 4 cases in which x is written for ∞ , and 2 cases of the omission of X .¹ The presence of these corruptions in this manuscript of the eleventh century helps to confirm the impression that manuscripts of the ninth century and later, however trustworthy in other respects, are not to be depended upon in their record of numbers unless that record is corroborated from some independent source.

IX. ERRORS DUE TO ABBREVIATIONS

Nothing shows more clearly the ignorance of the scribes of R, and their lack of familiarity with the Latin of the classical period, than the absurd blunders made in copying the abbrevia-

¹ See *Transactions* of the American Philological Association, vol. XXXIII, pp. 53, 54, where I have treated of the errors in the *Bambergensis* in more detail.

tions which occur in the *Puteanus*. These contractions, as is usual in uncial manuscripts, are comparatively few and simple. The more common of them are: *b.* for *bus* in the ending of the dative and ablative plural; *q.* for *que* the enclitic; *ē* for *est*; a stroke over the vowel for *m* or *n*; the use of initials in proper names (praenomina) and in such words as *senatus consultum, res publica, populus Romanus*; and contractions of two or more letters, such as *pr̄* for *praetor*, *cōs* for *consul*. It was, of course, natural that the scribes should not know what was meant by the contractions *s. c.*, *p. r.*, and *pr̄*, the first time they were encountered, but it was always possible to avoid error by writing the contractions as they were in P. They were not obliged to expand them and write the word in full.¹ But they often did not choose to adopt this safer course, and have expanded *p̄.* (= Publius) into *prae*, although *Scipio* is the next word, *p. r̄.* and *pr̄* into *per*, *cū* into *con*, without any regard for sense or construction, in passages where a minimum of understanding of the text they were copying, even if it did not suggest the word represented by the contraction, would have warned them against expanding this in such a way as to make nonsense.

It is evident from these blunders that most of the scribes of R had never before been engaged in copying the prose text of a pagan Latin writer. Otherwise they would have been more familiar with such common contractions as those for proper names at least. Their previous work, to judge from these errors, had been confined entirely to the copying of the church books, and being now set to work for the first time upon the text of one of the older Latin prose writers, they confused the abbreviations with which they were familiar with the contractions which occur in the text of Livy. Errors of the same nature must have been common in all the work of the early ninth century until the scribes became familiar with the abbreviations in the works of the older Latin writers.

¹ The scribe Landemarus, after having made all sorts of errors by wrongly expanding these signs of contraction, finally avoided further blunders by making in his copy uncial facsimiles of the abbreviations in P.

(1) The simplest form of this species of error among the scribes of R was the failure to recognize that a given letter or group of letters was an abbreviation. In consequence the contraction, if it consisted of a single letter, was attached either to the word which preceded it, or to that which followed; or, if it consisted of several letters, part of them were attached to the preceding word, and part to the next. This form of error was encouraged by the lack of word-division in P. The contractions were not separated from the surrounding letters except occasionally by a dot to the right, and not distinguished from them except by a horizontal stroke above the letter, while both of these indications were sometimes wanting.

Examples of attaching the abbreviation to the preceding word (this is most common with the letter *m*): XXII, 14, 9 si hoc modo peragrandā *cacumina saltusque m. furius* recipere a gallis urbem uoluisset P, *cacumina saltus quem furius* R. — XXVI, 28, 13 qui in exercitu *m. claudii, m. ualerii, q. fului* fuissent P, qui in exercitum claudii *m. ualerii*que fului fuissent R. — XXVII, 38, 11 auxilia . . . a *p. scipione m. liui* missa P, auxilia *apud scipionem (sic) liui* missa R. Here, in addition to writing *m* with the preceding word, a *p.* is taken for *apud*. — XXVII, 38, 11 mixtos numidas hispanosque *m. lucretium* has copias nauibus aduexisse P, hispanos *quem lucretium* R. — XXVIII, 13, 2 et eidem *gallia m. pomponio* mathoni sicilia P, *galliam pomponio* R. — XXVIII, 20, 8 si *m. pomponius* P, *sim pomponius* R. — XXVIII, 37, 8 in qua *m. liui* nomen erat P, in quam *liui* nomen erat R. — XXVIII, 7, 2 et ipse a *messana l. scipione* fratre in praesidio ibi relicto P, a *messanal scipione* R. — XXVIII, 13, 2 sicilia ti claudio P, *siciliati claudio* R. — XXVIII, 27, 15 sederunt in tribunali *p. scipionis* P, sederunt in tribunali *p. scipionis* R. — XXVI, 32, 1 principe eius sententiae *t. manlio torquato* P, principe eius sententia et manlio torquato R. — XXV, 40, 3 dedicata a *m. marcello* templa P, dedicata *am marcello* templa R. In M this has become a *marcello*. — XXVI, 26, 8 dilectum prope a *m. cornelius* P, dilectum prope *am cornelius* R. In these two cases a Latin word has

not been formed by attaching the abbreviation to part of the preceding word. Sometimes slight emendation was resorted to, as in XXIII, 20, 7 haec a *q.* fuluio intra paucos dies gesta P, haec atque fabio, etc. R, and in XXIII, 8, 17 aliquem in *civitate r.* (= Romana) *meliozem* bello haberi quam te P, *civitatem meliozem* R. Here the *r* after civitate was not understood, and consequently the scribe altered to *civitatem*.

Examples of attaching the abbreviation to the following word (not so common): XXIII, 38, 11 *l.* apustio legato P, *lapustio* legato R. — XXVI, 28, 3 *t.* otacilius P, *totacilius*¹ R. — XXVI, 33, 5 dein cum *m.* atilium P, dein cum *matilium* R.

Examples of the breaking up of two or more letters serving as an abbreviation: XXVIII, 5, 5 satis scire *sp.* lucretium P, satis scires *p.* lucretium R. — XXVI, 5, 8 ita inter se copias partiti sunt: *ap. claudius campanis*, fuluius annibali est oppositus P, *a p. claudius campanis* R. The scribe of M, perceiving that *a* was not a preposition, emended the passage and wrote *ea p. claudius*. — XXIII, 18, 9 additumque . . . censoriae notae triste *s. c.* (= senatus consultum) P, additumque . . . censoriae notaettristes *c̄* R.

(2) Many abbreviations did not admit of being attached to the adjoining words, and the scribe, not knowing what to do with the letter or letters which he did not understand, left them out altogether. These omissions are particularly common in cases where the preceding word happened to end with the same letter as the abbreviation, the scribe regarding the repetition of the letter as a dittography. They are, however, of frequent occurrence even when this is not the case.

Examples of the omission of abbreviations (the abbreviation omitted in R is given in italics in the reading of P): XXVIII, 37, 10 item *m.* liuius P, item liuius R. — XXV, 18, 4 sed in bello nihil tam leue est quod non . . . momentum *faciat. t. quinctio* crispino badius campanus hospes erat P. The scribe of R, regarding the two *t*'s as a dittography, has written *faciat quinctio*. — XXIII, 48, 2 ne . . . sumptui . . . essent. et *t.*

¹ This error in the case of the name T. Otacilius occurs quite frequently.

gracchus iussit P, essent et gracchus R. — XXIII, 19, 4 securae res ab hannibale essent, *ti.* gracchum proconsulem a benevento accitutum P, essent gracchum (omitting *ti.*) R. — XXVII, 40, 2 ut eodem tempore utrobique res *p̄.* (= publica) prospere gereretur P, res prospere (omitting *p̄.*) R. All the above examples of omission are due to supposed dittography, but in the following cases there is no such reason for the omission: XXVIII, 12, 9 cum *p.* sempronio P, cum sempronio R. — XXVI, 39, 3 praeerat classis commeatibusque *d.* quintius P, commeatibusq; quintius R. — XXV, 14, 7 qui sociis captorum concederent decus, *t.* pedanius princeps . . . P, decus pedanius R. — XXVII, 40, 4 multa secunda in italia siciliaque gesta quassata rem *p̄.* (= publicam) exceppisse P, quas satarem exceppisse R. — XXVI, 30, 12 pro uobis *p. e.* bella gerimus P, pro uobis *e.* bella gerimus was first written in R. — XXIII, 7, 8 incerto rerum statu *atp.* claudius P. Here *atp.* is a corruption of *app.* The scribe in R, Fredeğ, has written *statuat claudius*, omitting *p.*

(3) In the examples given in the two preceding classes, the error is due to the failure of the scribe to recognize contractions as such; but the largest class of errors, and the one which best illustrates the illiteracy and stupidity of the scribes of R, consists of the cases where the scribes recognized that there was an abbreviation, but expanded it wrongly. Though they had always the alternative of writing the abbreviation as it was in P in cases where they were in doubt, yet they have often chosen to expand the contractions in ways so absurd as to seem almost incredible.

(a) *per* wrongly written for *p̄. r̄.* (= *populus Romanus*) and *p̄r* (= *praetor*).¹

¹ This species of error is confined to the portion copied by Theodegrimmus. This scribe subsequently went over his work, and corrected all the mistakes given in the following list, except the first: by erasing the *e*, and drawing a line over *pr*; thus *p̄r*. This is the contraction for *praetor*, but the contractions for *praetor* and *populus Romanus* are often not distinguished even in P. In giving the contractions in the examples, I have inferred from Luchs's silence that the normal contraction was used in each case, namely *p̄r* for *praetor*, and *p̄r̄* for *populus Romanus*.

XXVI, 28, 11 l quinectio $\bar{p}r$ (= praetori) ad optinendam sici-
liam P, quinectio *per* adobtinendam R. — XXVI, 28, 12 totidem
legiones in sardiniam p. manlio uulsoni $\bar{p}r$ (= praetori) decre-
tae P, uulsoni *per* decretae R. — XXVI, 30, 1 multa de hieronis
regis fide perpetua erga $\bar{p}r$ (= populum Romanum) uerba fece-
runt P, erga *per* uerba R. — XXVI, 30, 6 quo scilicet iustiore
de causa vetustissimos socios $\bar{p}r$ (= populi Romani) trucidar-
et P, socios *per* trucidaret R. — XXVI, 30, 7 bellum cum $\bar{p}r$
(= populo Romano) gessissent P, cum *per* gessissent R. —
XXVI, 31, 1 non adeo maiestatis, inquit, $\bar{p}r$ (= populi Romani)
imperiiue huius oblitus sum P, inquit *per* oblitus sum R.

(b) *Prae* wrongly written for \bar{p} . (= Publius or publica).
This is a form of error confined to the work of Theogrimmus
and Landemarus, who were accustomed only to the regular
ninth-century usage of writing \bar{p} for *prae*. XXV, 41, 8 itaque
senatus romae decrevit, ut \bar{p} . cornelius $\bar{p}r$ (= praetor) litteras
capuam ad consules mitteret P, ut *prae* cornelius *populus roma-*
nus litteras . . . R. — XXV, 41, 11 et \bar{p} . sulphicium serg. f. P,
et *prae* sulphicium serg. f. R. This is copied into M as follows:
et pre sulphicium ser. g. f. — XXVI, 1, 1 de re \bar{p} . (= publica)
. . . consuluerunt P, de re *prae* . . . consuluerunt R. — XXVI,
1, 2 $\bar{a}p$. (= Appio) claudio P, a *prae* claudio R. — XXVIII,
9, 11 ad \bar{p} scipionem profectos P, ad *prae* scipionem R. —
XXVIII, 10, 1 cum \bar{p} . licinio cos. litterae romam allatae P,
prae licinio cos. R. — XXVIII, 10, 2 exercitum . . . dimitti
e re \bar{p} . (= publica) esse P, exercitum . . . dimitte re *prae* esse R.
— XXVIII, 10, 3 ut e re \bar{p} . fideque sua daret P, ute re *prae* fide
quae suadaret R. — XXVIII, 10, 7 \bar{p} . scipionis P, *prae* scipio-
nis R. — XXVIII, 11, 10 consules facti m. cornelius cethegus,
 \bar{p} . sempronius tuditanus apsens P, *prae* sempronius R.¹

(c) *populus* wrongly written for \bar{p} . where the contraction
stood for *Publius*, *publica*, etc. Errors of this nature occur

¹ The examples from Books XXV and XXVI are all from Theogrimmus, while
those from Book XXVIII are from Landemarus. In both cases these errors
cover about two pages. They were probably noticed by the supervisor of the
scriptorium, who prevented the further recurrence of the error.

in the quaternions signed by Theogriññ. and Theodegriññ. Inasmuch as these scribes were responsible for some of the errors given in the two foregoing lists, (a) and (b), it is probable that they were told by the monk who supervised their work that \bar{p} . sometimes stood for *populus*, and as a result of being thus cautioned they went to the extreme of writing *populus* for that contraction regardless of the sense.

Examples: XXVI, 36, 8 ut voluntaria conlatio et certamen adiuvandae rei *p*. (= publicae) excitet . . . P, certamen adiuvande rei *populus* excitet R. — XXVII, 4, 10 et alexandream ad *p*. tolomaeum (*sic*) et cleopatram reges . . . P, ad *populum* tolomaeum R. — XXVI, 1, 5 m. iunio netruria, *p*. sempronio in gallia . . . prorogatum est imperium P, netruria *populus* sempronio in gallia R. — XXVI, 2, 4 adscribi autem pro $\bar{p}\bar{r}$ (error for $\bar{p}\bar{r}$ = praetori) l. marcio P, adscribi autem pro *populus* l. marcio R.

(d) $\bar{p}\bar{r}$ (= praetor) wrongly expanded as *populus Romanus*.

This error is confined to the work of the scribe Theogrimmus. The abbreviations $\bar{p}\bar{r}$ and $\bar{p}\bar{r}$ are sometimes confused in P; but the scribe was not obliged to expand the contractions, and the absurdity of writing *populus Romanus* in the following passages would have struck him at once if he had had any understanding of the meaning of what he was copying. XXVI, 21, 17 m. cornelius $\bar{p}\bar{r}$ (= praetor) . . . militum animos sedauit P, m. cornelius *populus romanus* . . . militum animos sedauit R. — XXV, 41, 8 ut *p*. cornelius $\bar{p}\bar{r}$. (= praetor) litteras . . . mitteret P, ut *prae* cornelius *populus romanus* litteras . . . mitteret R. This absurd error has passed over into M, where, in an attempt to make sense out of the passage, the scribe has emended it as follows: ut prae cornelius populusq. romanus . . .

(e) Another mistake sometimes made by the scribes Theogrimmus and Theodegriññ is that of expanding the abbreviation $\bar{p}\bar{r}$ (= *populus Romanus*) in the nominative case, regardless of its relations to prepositions or verbs. This species of error well illustrates the purely mechanical character of the work of these two scribes. They had evidently

been informed, by the person in charge of the scriptorium, that $\bar{p}\bar{r}$ stood for *populus Romanus*, and they were satisfied to expand it as such without questioning whether or not it was the proper case.

XXVI, 21, 11 et quingena iugera agri, . . . qui aut regius aut hostium $\bar{p}.$ $\bar{r}.$ (= populi Romani) fuisset P, aut hostium *populus romanus* R. — XXVI, 21, 12 ex is (= iis) qui a $\bar{p}\bar{r}$ (= populo Romano) defecissent P, exis quia *populus romanus* defecissent R. — XXVI, 27, 11 quoad eo animo esse erga $\bar{p}\bar{r}$ (= populum Romanum) sciret P, erga *populus romanus* R. Here a corrector, in order to have the accusative case after the preposition, has written *erga populos romanos*. — XXVI, 36, 4 itaque classes habere atque ornare uolumus $\bar{p}\bar{r}$ (= populum Romanum) P, ornare uolumus *populus romanus* R. The error is perpetuated in M.

(f) The writing of *mille* and *milia* for \bar{m} . (= Marcus). For a full list of these confusions, see Chapter on the Numerals (VIII).

(g) *que*, the enclitic, or *quae* wrongly written for q. (= Quintus). Examples of this confusion are too numerous to be given in full, occurring, as they do, on almost every page of the manuscript and particularly in the portions copied by Aldo and Fredeğ. The confusion is not uncommon in P.

XXII, 8, 6 dictatorem *populus* creauit q. *fabium* maximum P; creauit *quae* *fabium* was first written in R. — XXII, 35, 2 c. *atilio serrano* et q. *alio* (*aelio Luchs*) *paeto* P, et *quae* *alio* *paeto* R. — XXII, 38, 13 et quod id constantius *perseueraret* q. *fabius* *maximus* sic . . . *adlocutus* fertur P, *perseueraretque* *fabius* R. — XXIII, 40, 1 postquam q. *mucius* $\bar{p}\bar{r}$ *graui morbo* est *implicitus* P, postquam *que* *mutius* R. — XXIII, 7, 12 tum q. *fabius* . . . *tali oratione* est *usus* P, tum *que* *fabius* R. — XXIII, 9, 5 ut q. *fuluio* . . . *urbana prouincia* esset P, ut *que* *fuluio* R. — XXVI, 33, 9 securique *percussos* a q. *fuluio* . . . P, securique *percussos* *aque* *fuluio* R. — XXVI, 33, 5 et q. *minucium* et l. *ueturium philonem*, item . . . P, atque *minutium* et l. *ueturium philo nemitem* R. Here the scribe has altered what he supposed was *etque* to *atque*.

(h) The following is a list of miscellaneous errors of less common occurrence than the foregoing:

The writing of *cōn* for *cū* in XXVI, 28, 9 *cū*. fuluio consuli P, *cōn* fuluio consuli R. This is copied into M as *cō fuluio*.

The confusion of *cōs* and *quos*: XXVI, 33, 13 fuluio procōs quosque . . . P, fuluio pro quosque R, the scribe regarding the *cōs* and *quos* as an apparent dittography.—XXVIII, 22, 5 quo die illum omnes centuriae priorem *cōs* dixissent P, priorem *quos* dixissent R.

apud for *a p.*: XXVII, 38, 11 auxilia ex hispania quoque *a p.* scipione m. livio missa P, *apud* scipionem liuiomissa R.

me for *m*: XXIII, 39, 8 inde *m* marcellum P, inde *me* was first written by the scribe in R.

(4) Thus far the examples have been confined to cases where a word was abbreviated by the use of the initial letter or letters. Errors arising from contractions within a word or at the end are confined to the sign $\bar{\text{—}}$, representing the nasals *m* and *n*, and the contraction *b*, for the ending *-bus* of the dative and ablative plural.

(a) From the sign $\bar{\text{—}}$ there spring two forms of error: (1) the omission of the nasal altogether, due to failure to notice the sign, and (2) the writing of *m* for *n*, or *vice versa*, in expanding the contraction. Examples of these two forms of error are exceedingly common, and I shall give only a few, without references: *e.g.* in *africa* for in *africā*, *reliquo* for *reliquō* (= reliquom), *imultos* for *imultos* (= in multos), *couchi* for *cōuchi*, *comeatibus* for *cōmeatibus*, etc.

(b) Examples of error arising from the contraction *b*. = *bus* are: XXVI, 40, 18 hos neque relinquere . . . in insula . . . velut materiam nouamdis reb. satis tutum ratus est P, nouam disrepsatis tutum R. Here the scribe failed to recognize *b*. as an abbreviation, and wrote *disrepsatis* for phonetic reasons of his own.—XXVI, 26, 2 sita Anticyra est in Locride laena parte sinum Corinthiacum intranti. breue terra iter eo . . . *Luchs*; P has this, in substance, with the exception of *locide* for Locride,

and *corynthiacum* for Corinthiacum. In R it is written as follows: *sita est in locide laeua parte sinum corynthia cum intrantibus reueterra iter eo*. The scribe supposed that the *b* of *breue* was the abbreviation for *-bus*. This passage is, in turn, copied into M as follows: *sita est in locidelauea parthesinum corynthia cum intrantib; reue terra, etc.*

X. ERRORS DUE TO CORRECTIONS IN THE *PUTEANUS*

Three series of corrections had already been made in the *Puteanus* before¹ the copying of R: (1) the scribe of the fifth century who copied it corrected many of the errors which he himself had made, and occasionally attempted to emend the text; (2) a subsequent corrector went systematically through the manuscript making numerous corrections for the most part of a superficial nature; and (3) it was corrected by a second corrector, whose corrections, however, were not nearly so numerous as those made by the scribe or the first corrector, and are confined to parts of the manuscript only. These three sets of corrections are designated by Luchs as P¹, P², P³, respectively. In all three the manner of making the correction is the same. Where it is the purpose of the corrector to strike out a letter or letters, erasure is not resorted to, but a fine line is drawn diagonally through the letter, and a little dot is sometimes placed above it in addition (thus, ' /). Corrections of this nature are made in such a way as to be as inconspicuous as possible, and not disfigure the manuscript, so that one has sometimes to look twice to see them. Where it was desired to insert letters, or substitute them in the place of those which had been stricken out, they were

¹ The corrections in P, designated by Luchs as P⁴ and P⁵, which were made after its copy R had been completed, do not concern the purpose of the present paper. The numerous corrections made in P by means of erasure are also later than the copying of R, for the reason that the letters erased in P are there to be found fully written. Occasionally Luchs has been in doubt as to what was originally written in P where letters have been erased. In most of these cases the erased letters can easily be established by consulting R.

written above the word and were likewise made small and inconspicuous.

These corrections were not drawn from any manuscript authority,¹ but were simply superficial alterations which suggested themselves to the scribes or the two correctors. They are therefore not at all trustworthy, and not unfrequently passages were thus altered which were perfectly correct. Naturally the existence in P of these corrections, upon which so little reliance could be placed, greatly increased the difficulties of the scribes of R. They were constantly confronted with the necessity of choosing between the original reading of the manuscript and the correction, or of adopting a compromise when both were manifestly wrong. Inasmuch as Alcuin had been influential in shaping the methods of the School of Tours at the beginning of this revival under Charlemagne, and had insisted upon accuracy in the copying of the church books, one would expect to find that here also the scribes had been furnished with some principle upon which to decide between the two readings, and to find them adhering strictly to the original readings or to the corrections, or departing from the one method or the other upon some critical principle. But one looks in vain for evidence that they followed any definite instructions, or that they made use of any critical faculty in deciding between readings. The scribes follow the one reading or the other almost at random, often giving the reading of P¹ when it is manifestly wrong, or of P² when the original reading is manifestly right,² and often the correction passed unnoticed entirely. Their treatment of corrections is throughout in keeping with the character of the rest of their work.

Frequently, by reason of oversight or failure to understand the purpose of the correction, the scribes have written neither the original reading of P nor the correction, but a corruption

¹ See Luchs, Introduction to his edition.

² The treatment of the corrections in P by the scribes of R has been discussed by Wölfflin in an article in the *Philologus*, XXXIII, 1863, pp. 186-189.

which sometimes contains elements from both the original reading and the correction, and sometimes omits elements from both. Corruptions of this nature form a large class and are the more serious, because, if the *Puteanus* had been lost, many of them would have offered little clue toward emendation. I have attempted to classify them as follows:

(1) The scribes were often mistaken with regard to the extent of a correction in P by reason of the fact that the lines and dots, by which the deletion of letters was indicated, were usually made as light as possible, in order that the manuscript might not be unnecessarily disfigured. The eye was consequently sometimes deceived into believing that the corrections were more extensive than they really were.

Examples: XXVII, 40, 2, P¹ wrote *deos urbit* eodem tempore. Subsequently he corrected *urbit* to *ut* by placing dots over the three letters to be omitted (thus, *urbit*). It was easy enough for Ansoaldus to overlook the fact that the correction did not extend to the whole word, and consequently he wrote *deos eodem tempore*, omitting the word altogether. — XXVIII, 20, 10 *consultum sine alto sine alterius* P¹; the words *sine alto* are deleted by P². R has *consultum nealterius*, the scribe imagining that the correction extended farther than it really did. — XXIII, 19, 13 *adicitumque* P¹, *radicumque* P², *radique* R. — XXVIII, 35, 3 *proanimos* changed to *primos* by P¹, *imos* R. — XXIII, 21, 7 *creatique caecilii* P¹, *creati q. caecilii* P², *creati caecilii* R (omitting *q*). — XXIII, 21, 7 *et quam fabius* P¹, *et q. fabius* P², *et fabius* R. — XXVIII, 12, 4 *uincinculo* P¹, *uicinculo* P², *unculo* R. — XXVI, 38, 10 *liberius fingenti sitia* ita inde P¹; *sitia* was altered to *sit* by P². R has *fingentis ita*, the scribe imagining the correction to extend to the *it* as well as the *ia*. — XXIII, 42, 5 *usideatur* corrected to *uideatur* P¹, *udeatur* R.

In the above examples the scribes imagined that the lines or dots used in deletion extended to more letters than was actually the case. Sometimes the opposite error is made, and some of the deleted letters find their way into the text. *E.g.*:

XXIII, 46, 13 obsequitastaset P¹, obequitasset P², obequitasaset R. — XXVIII, 24, 2 scipionis amquam P¹, scipio tamquam P², scipioni tamquam R.

(2) Corrections in P which involved the alteration of a single letter were made by drawing a line through the letter to be changed and writing the corrected form above it. In the case of such corrections the eye of the copyists of R has often caught the letter added above the line, but not the sign of deletion drawn through the letter immediately below, and in consequence both the error and the correction have been embodied in the text of R.

Examples: XXII, 25, 7 edenti casilini P¹, sedenti casulini P², sedenti casuilini R. — XXII, 33, 2 uicisti P¹, uicinti P², uicinsti R. — XXIII, 48, 6 quin et ue/ra P¹, qui nec ue/ra P², quinectuera R. — XXVII, 6, 7 tarsumennum P¹, trasumennum P², tarasumennum R. — XXVII, 21, 10 tatis P¹, satis P², statis R. — XXVII, 26, 13 iocur P¹, iecur P²; *ieocur* was first written in R. — XXVII, 33, 3 ramam P¹, famam P², flamam R. The scribe altered *r* to *l* apparently as an improvement in spelling. — XXVIII, 10, 5 etriscorum P¹, etruscorum P², etruiscorum R. — XXVIII, 16, 6 dua fugae P¹, dux fugae P², dux afugae R. — XXVIII, 18, 2 *dirimā darum* corrected to *dirimē darum* P¹, *dirimē*/darum P², *dirimaedarum* R. — XXVIII, 28, 7 conpuges P¹, coniuges P², conipuges R.

(3) Corruptions arising from mistaking the purpose of corrections placed above the line, and inserting letters in the wrong place in the text. Examples: XXVII, 40, 8 proditumst P¹, proditum est P² (the correction being made thus: ^{est}), proditum *sed* R. The scribe imagined that the word was *set*, and altered the spelling to *sed*. — XXVI, 39, 3 teterum P¹, ceterum P²; tectetur R¹. This is now corrected to *ceterum*. — XXVIII, 10, 4 etturiā P¹, ettruriā P², etturriam R. — XXVIII, 4, 8 estimularet P¹, estimularet P² (probably meant, however, for stimulare). Here Landemarus wrote in R *et imularet*, which a corrector having P before him has altered to *et simularet*. — XXIII, 8, 13 experti t. otacilie musus (*sumus* after correc-

tion) P¹, *experti t. te acili ope sumus* P², *experti t. laecilio pesumus* R¹ (*l* in *laecilio* arises from confusion of letters). This is now corrected to *experti t. laecili ope sumus*. — XXVII, 49, 4 *ne superstes tanto* P¹, *ne superesset tanto* P². The correction was made thus: *super^{e a i}stes*. A fine stroke was drawn through the *t* and the last *s*. R has *superest*.

(4) Sometimes the scribes have omitted both the correction and the letters to be corrected: XXVIII, 24, 5 *non ultra esse cunctandum apt* P¹, *non ultra esse cunctandum ait* P²; here R has omitted both *i* and *p*, and written *at*. — XXVIII, 34, 9 *seuehensis* P¹, *seuentis* P², *seuentis* R. — XXIII, 3, 3 *quae* P¹, *quai* P³, *qua* R. (For other examples see Chapter on Omission.)

(5) The scribe Fredeḡ, instead of omitting both the difficulty and the correction, adopted the plan of leaving a blank where he did not understand the purpose of a correction. These blanks were filled in by the corrector. *E.g.* XXIII, 3, 15 *attipeū* P¹, *at it ipsut cū* P². Here, after an erasure, Fredeḡ wrote *adidip*, leaving a blank for the space of several letters, in which the corrector wrote *sud*. — XXIII, 42, 2 *his parum fide eamus* P¹, *his parum fidebamus* P². Fredeḡ wrote *his parum amus*, leaving a blank in which the corrector wrote *fideb*. — XXIII, 39, 8 *super besumiam* P¹, *super besuuium* P²; *superbe* was written by Fredeḡ, who left a blank in which *suuium* was written by the corrector. These blanks have all been filled in by the corrector, but it is conceivable that, in other manuscripts of the period, blanks were left which were not filled in by subsequent correctors, thus giving rise to a lacuna.

Similar caution was shown in a few cases where the scribes made a facsimile of both the original word and the correction as they stood in P. Examples of this are unfortunately rare. — XXV, 16, 7 *cam* P¹, *clam* P², *cam* R. — XXV, 20, 5 *ducas* P¹, *ducis* P², *ducas* R.

[To be concluded.]

F. W. SHIPLEY.

BAETYLIA

"THE worship of holy stones," I have written elsewhere, "is one of the oldest forms of religion of which we have evidence, and one of the most universal. It has frequently persisted in venerable cults in the midst of high stages of civilization and in the presence of elevated religious conceptions, while its survivals in popular superstitions have proved nearly ineradicable."¹

The holy stone was sometimes a natural rock, of striking form or position, *in situ*; sometimes a prehistoric megalith; more frequently a rude block set up for the purpose. It was most commonly of oblong shape, roughly circular or rectangular in section, rounded or pointed at the top. The tapering rectangular block was often fashioned to an obelisk or a pyramid; the round one, to a cone (*meta*) or omphalos. In some places the steps of the further development to rudely iconic forms, and finally to the statue as a work of art, can be traced. On the other hand, the holy stone may grow into an altar on which offerings are made.

Of the origin of this wide-spread phenomenon we may say, as Tacitus does of the sacred stone of Aphrodite at Paphos (*Hist.* II, 3), "ratio in obscuro"; but the oldest conception to which we have historical testimony, and the most general in modern times, is that the stone is the seat (*εδος*) of a numen; it is the primitive equivalent at once of temple, idol, and altar.

A distinct class of holy stones are the so-called βαίτυλοι, or βαίτυλια. The earliest mention of these is in the Phoenician

¹ *Encyclopaedia Biblica*, III, 2279; cf. 3352 f.

History of Philo of Byblos (died under Hadrian), professedly based upon the native work of Sanchoniathon. In *frag.* 2, 19 (*F.H.G.* III, 568, A), we read, ἐπενόησε θεὸς Οὐρανὸς βαιτύλια, λίθους ἐμψύχους μηχανησάμενος ("Uranos invented baetylia, contriving animated stones"); in the theogony (*ibid.* *frag.* 2, 14; *F.H.G.* III, 567, B), Uranos and Gē have four sons, — Ἥλῳν τὸν καὶ Κρόνον, καὶ Βαίτυλον, καὶ Δαγῶν ὃς ἐστὶ Σίτων, καὶ Ἀτλαντα.

The baetylia, then, were λίθοι ἔμψυχοι. The modern reader is not unlikely to interpret the words, in the light of animistic theory, "stones with souls," an expression that might apply to any holy stone inhabited by a numen. But Philo — though, for his time, up in the latest theories of the origin of religion — had not had the advantage of reading Tylor, and doubtless used ἔμψυχος in the sense in which Plato, *e.g.*, defines it in the *Phaedrus* (245 E),¹ πᾶν γὰρ σῶμα ᾧ μὲν ἔξωθεν τὸ κινεῖσθαι ἄψυχον· ᾧ δὲ ἐνδοθεν αὐτὸ ἐξ αὐτοῦ ἔμψυχον· ὡς ταύτης οὐσης φύσεως ψυχῆς, which Cicero (*Tusc.* I, 23, 54) translates: "Inanimatum est enim omne quod pulsu agitur externo; quod autem animatum est, id motu cietur interiore et suo; nam haec est propria natura animi et vis."

The distinctive peculiarity of λίθοι ἔμψυχοι, therefore, is that they are endowed with the power of self-motion. So the words were correctly interpreted by Joseph Scaliger: "... Baetylos illos fuisse ἐμψύχους et sponte moveri solitos dicunt."²

The appearance and behavior of such an "animated stone" is described at length in the Orphic *Lithica*:³ Apollo gave Helenus a speaking stone, an unerring lodestone,⁴ which others call "animated (ἐμψυχον) mountain-stone." It was round, roughish, firm, dark colored, dense; its whole surface was covered, in

¹ See also Arist. *De anima*, I, 2 (403, b 25); *Phys.* IX, 4 (255, a 7), self-motion is ζωτικόν . . . καὶ τῶν ἐμψύχων ἰδιον. The definition is said to go back to Thales, who attributed life to the lodestone because it moves iron; see Arist. *De anima*, I, 2 (405, a 10); Plut. *De placit. philos.* IV, 2, 1; Diogen. Laert. I, § 24.

² *Animadr.* Euseb. *ad ann.* 2150.

³ Ed. Abel, v. 380 ff.

⁴ On the marvels of the magnet, see Plin. *N.H.* XXXVI, 126.

every direction, with wrinkly veins. To obtain a response, the possessor, after a period of purification, bathed the knowing stone, swaddled it like a babe, and, by sacrifices and incantations, got it to breathe; then, after he had dandled it a long time, it suddenly started up the cry of a new-born infant — woe to him if, in alarm, he let it fall! To any question now put to it, it returned an infallible response; then, if closely watched, it would be seen miraculously to cease breathing (*θεσπεσίως . . . ἀποψύχοντα*).

Damascius,¹ in his life of Isidorus, gives us similar descriptions of the baetylia, which were particularly common in the region of the Lebanon. A certain Eusebius, who was the possessor — or, rather, minister (*θεραπεύων*) — of a baetyl, told the story that one night he had a sudden impulse to wander, from the city of Emesa, to a mountain a long way off, on which was an ancient temple of Pallas. While he was resting himself there, he saw a ball of fire rushing down from on high; when it reached the earth there appeared beside it a lion, which presently vanished. When Eusebius approached the spot, he found the stone cooled off, and, recognizing that it was a baetyl, took it home with him. Damascius describes it as an exact sphere about nine inches in diameter, of a dull white color, though it varied in size, and sometimes turned purplish. There were letters on the stone, colored with vermilion, through which responses were given to inquirers. The stone also emitted a thin, piping voice, which Eusebius interpreted.

Eusebius's baetyl belonged to a god, Gennaïos, who was worshipped at Heliopolis in the form of a lion; others were dedicated to other deities, such as Kronos, Zeus, or Helios.

Damascius thought the baetyl was something divine, but Isidorus held that it was a daemon that moved it — one of the kind that is neither very bad nor very good.

In another place² Damascius says that, in the vicinity of the

¹ Preserved in Photius, *Bibliotheca Codicum*, cod. 242, p. 348 Bekker = Migne, *Patrol. Graeca*, CIII. 1292 f.

² Photius, *op. cit.* 342 Bekker = 1273 Migne.

Syrian Heliopolis, Asclepiades went up on Mt. Lebanon and saw many of the so-called baetylia, "about which he tells many marvels." Damascius himself had seen a baetyl moving through the air, and again hidden from sight in its garments or carried in the hands of its minister.

From Damascius is derived the wisdom we find in the *Etymologicum Magnum*, and in Zonaras, Βαίτυλος, λίθος γενόμενος κατὰ τὸν Λίβανον τὸ ὄρος τῆς Ἡλιουπόλεως.

A Christian writer of uncertain date, Joseph, the author of the *Hypomnesticon*,¹ in a chapter on various forms of pagan divination, writes: χρηστήρια διαβόητα παρ' αὐτοῖς ἐστὶ τὰ ἐν τοῖς ναοῖς βαιτύλια διὰ λίθων ἐν τοῖς στοιχείοις προσρασσάντων.²

Sotacus of Carystus (Plin. *N.H.* XXXVII, 135) classed the baetylia with the *cerauniae gemmae*, of which there are two kinds, black and red, resembling axes; the black, round ones are sacred; by means of them cities and fleets are captured, — these are called baetyli, — while the long ones are "ceraunian" in the narrower sense.

The word βαίτυλος occurs in only one other connection. In the lexica it is explained as the name of the stone which was given to Kronos to swallow in place of the infant Zeus. Thus the *Etymol. Magn.*, s.v.: Βαίτυλος δὲ ἐκλήθη καὶ ὁ λίθος ὃν ἀντὶ Διὸς ὁ Κρόνος κατέπιεν· εἴρηται δὲ ὅτι ἡ Ῥέα Βαίτη αἰγὸς σπαργαλώσασα τῷ Κρόνῳ δέδωκε· Βαίτη δὲ σημαίνει τὴν διφθέραν.

This statement is found in substance in several other lexicographers and grammarians: Herodian, *Περὶ καθολικῆς προσφδίας*, VI (ed. Lentz, I, 163); Hesychius (ed. M. Schmidt, I, 353); Theognostus, *Κανόνες*, 61, 21 (Cramer, *Anecdota Oron.* II); *Λέξεις Ῥητορικαί* (Bekker, *Anecdota Graeca*, I, 224); *Etymol. Gudianum*, etc. Here belongs, also, the proverb from Arsenius's collection (Leutsch, *Corpus Paroem.* II, 468): καὶ βαίτυλον ἂν κατέπιες· ἐπὶ τῶν ἄγαν λιμβῶν. Βαίτυλος ὁ ἐστὶν

¹ First printed in Fabricius, *Codex Pseudepigraphus* V, T. II, 326 ff., then by Galland, *Bibl. Vet. Patr.* XIV, 3 ff., Migne, *Patrol. Graeca*, CVI, 16 ff.

² A footnote (? gloss) in Fabricius adds, βαιτύλια λίθοι ἐμψυχοὶ ἐν ἀέρι κινούμενοι.

ὁ ἐσπαργανωμένος λίθος ὃν Κρόνος κατέπιεν ἀντὶ τοῦ Διός. A comparison of these passages plainly shows that they are all ultimately derived from one source.

The myth of Kronos devouring his offspring and the fraud by which Zeus was saved from this fate¹ is Cretan; the god of whom it is told is evidently related to the Phoenician Kronos (El), of whom Philo of Byblos relates that he killed a son and daughter with his own hands (*frag.* 2, 18; *F.H.G.* III, 568), and on more than one occasion sacrificed his own children (*ibid.* *frag.* 2, 24; 4 f.).

The Semitic word² *βαίτυλος* itself, of which the Greeks give far-fetched etymologies, connects the Cretan myth with the Phoenicians. The presumption, therefore, is that the stone which was shown in Crete as the Zeus stone was really such a baetyl as those in the Lebanon described by Damascius. Direct evidence of this is lacking; but two passages may at least be cited in this connection: Porphyry, in his life of Pythagoras (§ 17), narrates how Pythagoras in Crete visited the mystae of Morgos, one of the Idaean Dactyls,³ and by them was purified "with the ceraunian stone," after which he went down into the Idaean cave, etc. The other passage is a note of Tzetzes on Lycophron, l. 400: *Δίσκον δὲ τὸν Δία λέγει διὰ τὸν λίθον τὸν ἀντὶ Διός ὑπὸ 'Ρέας σπαργανωθέντα καὶ ὑπὸ Κρόνου καταποθέντα, ὥς φησιν Ἡσίοδος ἐν τῇ Θεογονίᾳ κ.τ.λ.*

We read in Hesiod (*Theog.* 497-500) that, when Kronos had disgorged the stone, Zeus set it up at Delphi, "to be a sign in after times and a marvel to mortals."⁴ Pausanias (X, 24, 6) was shown there a stone, of moderate size, on which oil was

¹ Hesiod, *Theog.* 468 ff. Represented on an altar relief in Rome (Overbeck, *Kunstmythologie*, II, 326; Baumeister, *Denkmäler*, II, 798) and on a red-figured vase of Sicilian origin (J. De Witte, *Gazette Archéologique*, I, 30 ff. and pl. 9). According to Paus. IX, 2, 7, the scene was represented in a temple of Hera at Plataea.

² See below, p. 203.

³ The Idaean cave as place of Zeus's birth, in later poets, etc.; see Callim. *In Jov.* 4 ff.; Preller-Robert, I, 133.

⁴ A. Meyer (1887) and Peppmüller (1896) reject vv. 492-500, as well as 501-506, which are more generally regarded as an interpolation.

daily poured, while on every feast day white wool was placed upon it; it was reputed to be the stone that was given to Kronos instead of his son.

There is no reason to believe that the stone at Delphi had actually been transported thither from Crete, as the stone of the Mater Deum of Pessinus or that of Elagabalus of Emesa was brought to Rome. The probability is vastly greater that the foreign myth was simply attached to an old Zeus stone at Delphi,¹ just as the scene of the deception of Kronos was localized at Chaeronea (Paus. IX, 41, 6). In later times the Terminus on the Capitol at Rome was identified with the stone which Saturn had swallowed (Lactant. I, 20, 37). Perhaps the local custom of covering the holy stone at Delphi with wool suggested the λίθος ἐσπαργανωμένος of the myth.

However that may be, there is neither in the tradition nor in the facts as reported to us any warrant for applying the name βαίτυλος to the Delphian stone, as modern writers often do.

The word βαίτυλος is of Semitic origin—more specifically, as the vowels show, Phoenician. *Bait-yl*, corresponding to Hebrew *beth-ēl*, may be translated *ad verbum*, "house of god"; but, as often, the seeming exactness of the literal rendering is misleading. *Ēl* (Phoen. *Yl*) is a much vaguer word than our "god"—it is merely δαιμόνιον; we may approximately render it "supernatural power"; and *bait* in such compounds is a place where, or a thing in which, something is. *Bait-yl* therefore is, more properly, "a thing in which is a supernatural power, a daemonic life." It admits equally the opinion of Damascius, who thought θεϊότερον εἶναι τὸ χρῆμα τοῦ βαιτύλου, and that of Isidore, εἶναι . . . τινα δαίμονα τὸν κινοῦντα αὐτόν.²

A synonym of *baetylus* is *abaddir*. Priscian (VII, 32, ed. Hertz, I, 313) writes: "*Abaddir* ὁ βαίτυλος . . . lapis quem pro Iove devoravit Saturnus." That this also was a λίθος ἔμφυχος appears from Mythogr. Vatican. (*Scriptores Rerum Mythicarum*

¹ Schoemann, *De incunabulis Jovis*, 7 f. = *Opusc. Acad.* II, 254, who, however, erroneously thinks that the myth started at Delphi.

² See above, p. 200.

Lat. ed. Bode, p. 34): Rhea "misit Saturno gemmam in similitudinem pueri celsam, quam abidir vocant, cuius natura semper movetur."

Augustine (*Ep. 17, 2, ad Maxim.*), replying to the pagans, says: "miror, quod nominibus absurditate commoto in mentem non venerit habere vos et in sacerdotibus Eucaddires et in numinibus Abaddires." An inscription from Mauretania (*Ephem. Epigraph. VII, no. 529*) reads: "abaddiri · sa[n]cto · culto[re]s · iuniores suis sumpt | aram constitu | pro . . ." The word occurs frequently in Latin glossographers, — who need not be quoted here, — as equivalent to *baetylus*, with or without the story of Saturn and Rhea.

The word *abaddir*, like *baetylus*, is of Semitic origin; Augustine's reference is to its use by the Punic population of North Africa; from Mauretania comes the inscription of the *cultores iuniores*. The natural interpretation of the name is "mighty or noble father"; the epithet *addir* is repeatedly applied in the Old Testament to God, and occurs in other Phoenician compound names; cf. *Baliddir* in a Numidian inscription (*Ephem. Epigraph. VII, no. 792*).

Upon the question what the *baetylia* really were, I do not propose to enter here. They were believed to be fallen from heaven, that is, to be small aerolites, and in some instances they may have been such; but, in the light of kindred beliefs in many parts of the world, it is probable that they were generally prehistoric stone implements, especially axes and "mace heads."¹

It appears, from the examination of all the evidence, that the name *βαίτυλοι* was appropriated to certain small stones of

¹ Cf. Plin. *N.H. XXXVII, 135*, "similis eas esse securibus." They were not belemnites, of which Pliny speaks, as a third class, in the following sentence. On stone axes regarded as thunderbolts, see Lenormant, *Revue de l'Hist. des Religions*, III, 48, Daremberg et Saglio, *s.v. Bétyles*, with references; further, J. Evans, *Ancient Stone Monuments*², 62 ff.; A. J. Evans, *Journ. Hellen. Studies*, XXI, 118. Greek peasants still call stone axes *ἀστροπελέκια* (Dumont, *Rev. Archéol.* N.S. XV, 358). The same belief about white jade axes in China (Keane, *Man Past and Present*, 219); among the Shans (*ibid.* 172); in Mexico (Ratzel, *History of Mankind*, II, 152), etc.

peculiar character, to which various daemonic—or, as we might say, magical—properties were ascribed; they moved about, talked, or otherwise answered questions, and afforded a powerful protection to their possessors. There is no evidence that the name was anywhere applied to the ordinary holy stones,—cones, pillars, omphaloi, or the like.¹

Many modern writers, on the contrary, employ the term of the latter specifically. Thus, L. Schmitz, in Smith's *Dictionary of Biography and Mythology*, s.v., writes: "Baetylus (*βαίτυλος*) is in reality the name of a peculiar kind of conical-shaped stones, which were erected as symbols of gods, in remarkable places, and were, from time to time, anointed with oil, wine, or blood." And—not to name any others—Sir Arthur Evans, in his instructive 'Mycenaean Tree and Pillar Cult,'² constantly uses the word *baetylus* in the sense of "stone pillar," "the aniconic image of the divinity" (p. 113); he applies the name "baetylic altars" to a type of altar or table supported by four legs over a central, slightly tapering stone, and thinks that in one of these the stone may, perhaps, represent the actual Cretan *baetylus* of Zeus (§ 6); he even speaks of sepulchral stelae as "baetylic habitations of departed spirits"—so completely has the word become for him a name for any *cippus* conceived to be the seat of a numen or spirit.³

The origin of this deflection of the word to a use so contrary to that which it has in the ancient authors is an interesting and instructive chapter in the history of learning. In the sixteenth and seventeenth centuries the theory prevailed that heathen rites and customs were, in great part, perversions of the purer primitive religion whose record we have in the Old Testament.⁴

¹ See Falconnet, *Mém. Acad. Inscr.* VI, 523 (1722), where the whole matter is correctly stated.

² *Journ. Hellen. Studies* (1901), XXI, 99 ff., and separately.

³ The presentation of the subject is not free from minor errors of fact, as when (p. 113) the author says that the name *βαίτυλος* was "applied to the black cone representing the Sun God at Baalbec." The *Etymol. Magn.*, which is cited in support of this statement, says nothing of the kind.

⁴ The theory is, of course, much older.

The anointing of holy stones (λίθοι λιπαροί) was thus a perversion to idolatry of a patriarchal precedent.¹ In his flight to Syria, Jacob passed a night at a place called Luz. Having taken one of the stones of the spot as a pillow, he slept, and in his dream saw a ladder reaching from the earth to heaven and the messengers of God ascending and descending upon it. The vision showed him that the place was an abode of divine beings, the entrance of heaven. In the morning he took the stone that was under his head, set it up as a pillar (*massēbāh*), poured oil upon it, and vowed that, if he returned in safety, this stone should become a temple (בית אלֹהִים); this was the way that the place came to be called Bethel (בֵּית־אֵל).²

The name *bēth-ēl* naturally suggested the *βαίτυλοι*. Joseph Scaliger, after referring to the anointing of holy stones, and to the *βαίτυλοι* of Philo of Byblos and the *βαίτυλος* which Saturn swallowed, wrote: "omnemque hunc morem manasse ab eo lapide, quem unxerat Jacob in Bethel."³

One of the most learned — and most perilously ingenious — of French scholars, Bochart, went a step farther. He not only explicitly derives the name *baetylia*, *baetylus*, from the place Bethel, but, by a bold emendation in "Sanchoniathon," the alleged Phoenician original of Philo, he identifies the objects with *lapides uncti*. Philo, as we have seen, calls the *baetylia* λίθοι ἑμψυχοι. "Live stones," says Bochart, "is a contradiction in terms, an absurdity; instead of *nēphāshīm* ('animati'), Sanchoniathon doubtless wrote *nēshāphīm* ('uncti'),⁴ from the root *shūph*, used in Syriac in the sense 'anoint.'" Then, after quoting the story of Jacob, he continues: "The Phoenicians, with an unhappy imitation of this example, first worshipped the stone which the patriarch had set up; then they anointed and consecrated other stones, and called them *baetylia*, *baetyli*, in memory of the stone at Bethel."

¹ Falconnet cites as adherents of this opinion, besides Bochart and Scaliger, G. J. Voss, Grotius, Selden, Huet, Heidegger, Witsius, etc.

² Gen. xxviii.

³ *Animadv. Euseb. ad ann.* 2150.

⁴ Perhaps it is not superfluous to say that this "Phoenician" is purely fictitious.

To the conclusive refutation of Bochart by Falconnet no attention was paid, while the whole long passage from the *Geogr. Sacra*, in which Bochart set forth his theory, has been incorporated bodily in modern editions of the Greek *Thesaurus*, through which its philological and historical errors have filtered into the encyclopaedias and hand-books of classical archaeology.¹

Classical scholars the more readily accepted this erroneous theory, because they incautiously assumed that the name *βαί-τυλος*, given in the lexicographical tradition to the stone swallowed by Kronos, referred — or might be referred — to the stone at Delphi, of which the same story was told. Since this was daily anointed with oil, the connection with the stone pillar which Jacob anointed at Bethel seemed to be doubly secured.

Many modern Old Testament students, on their side, surmise that the name *bēth-ēl* originally belonged, not to the place, but to the holy stone itself as "the abode of a divinity," corresponding thus, in fact as well as in name, with the "fetish-stones" which the Greeks designated by the foreign word *βαίτυλοι*.²

It must be borne in mind, however, that this theory is suggested, not by anything in the Hebrew accounts in *Genesis*, but solely by the etymological association with the *βαί-τυλοι* and by the "baetylic" theories of classical scholars. What is much more important to observe is that in no Semitic language is the word *bēth-ēl* or its equivalent used to designate the rude standing stones, pillars, obelisks, and the like which were found at every place of worship. The argument from silence is of more than usual force, because the references to these stones are so numerous, and the various names by which they were called so abundantly attested.³

¹ Tümpel, *e.g.*, in Pauly-Wissowa, *s.v.* *abaddir*, reproduces Bochart's impossible etymology.

² See, *e.g.*, Gunkel, *Genesis*, 290.

³ See *Encyclopaedia Biblica*, *s.v.* *Massebah*.

In Phoenician we know them from inscriptions on the objects themselves.

Summing up, then, the results of this investigation—which may fairly claim to be exhaustive—we may say that there is no evidence, either from Semitic sources or from Greek and Latin authors, that the name *baetylus* was ever applied in antiquity to the class of objects which modern archaeologists habitually call “baetyls”; on the contrary, it was the distinctive designation of an entirely different thing.

It is to be hoped that the abuse of the term may not become unalterably fixed. There is no lack of names properly applicable to the common holy stones; there is no other convenient word for the real *baetylia*.

GEORGE F. MOORE.

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J. E. Weis-Liebersdorf. Christus- und Apostelbilder. Einfluss der Apokryphen auf die ältesten Kunsttypen. Freiburg i. B., 1902, Herder'sche Verlagsbuchh. ix, 124 pp.; 54 figs. 8vo. — **F. Witting.** Die Anfänge der christlichen Architektur. Gedanken über Wesen und Entstehung der christlichen Basilika. (Zur Kunstgeschichte des Auslandes. X.) Strassburg, 1902, J. H. E. Heitz. vii, 161 pp.; 26 figs. 8vo.

III. MEDIAEVAL

- Abbé Charles Ablin.** Chroniques sur le culte de saint Denis, premier évêque de Paris (le Tombeau; les Translations; la Basilique; les Cérémonies; les Pèlerins; les Miracles; la Ville sainte; la Révolution; l'Église neuve). Paris, 1902, Retaux. viii, 172 pp. 18mo. — **Karl von Amira.** Die Dresdener Bilderhandschrift des Sachsenspiegels. Vol. I. Leipsic, 1902, Karl W. Hiersemann. 184 pls. Gr. folio. In two portfolios; subscription price of each, \$22.50.
- E. Bassermann-Jordan.** Die dekorative Malerei an Bayerischen Höfen. Munich, 1902, Bruckmann. 100 pp.;

- 11 pls.; 100 figs. 4to. \$4.50. — **Luca Beltrami**. Gli Avanzi della Basilica di S. Maria in Atrona a Milano. Milan, 1902. Umberto Allegrretti. 45 pp.; 50 figs. 4to. — **J. W. Bradley**. Historical Introduction to the Collection of Illuminated Letters and Borders in the National Art Library. London, 1901, Eyre & Spottiswoode. — **J. W. Brown**. Dominican Church of Santa Maria Novella at Florence. Historical, Architectural, and Artistic Study. Edinburgh, 1902, Schulze & Co. ix, 176 pp.; 9 pls. 4to. \$5.25. — **R. Bruck**. Die elssässische Glasmalerei vom Beginne des XII. bis zum Ende des XVII. Jahrhunderts. Strassburg, 1901, Heinrich. I. Lief. 10 pls. Folio. — **Bulteau**. Monographie de la cathédrale de Chartres. 2d ed. Chartres, 1902, Salleret. lii, 352 pp.; figs. 8vo. — **D. Butler**. Scottish Cathedrals and Abbeys. With Introd. by R. H. Story. London, 1900, Black. xv, 210 pp. 8vo. \$0.38.
- P. Leopold de Cherance**. Sainte Claire d'Assise. Paris, 1901, Poussielgue. xiv, 253 pp. 16mo. — **A. Chroust**. Monumenta palaeographica. Denkmäler der Schreibkunst des Mittelalters. I. Abt.: Schrifttafeln in latein. u. deutscher Sprache. Munich, 1901, F. Bruckmann. 1 Serie. 2 Lfg. 20 pp.; 10 pls. Gr. folio. \$5.00. — **J. Clément** and **A. Guitard**. Vitraux de Bourges: Vitraux du XIII^e siècle de la cathédrale de Bourges. Bourges, 1902, Tardy-Pigelet. xi, 120 pp.; 54 pls. 8vo. — **A. Cocchi**. Degli antichi reliquiari di Santa Maria del Fiore e di S. Giovanni di Firenze. Florence, 1902, Cocchi & Chiti. 63 pp.; figs. 8vo. — **C. A. Cummings**. A History of Architecture in Italy, from the Time of Constantine to the Dawn of the Renaissance. Boston, 1901, Houghton, Mifflin, & Co. 2 vols. 8vo. \$7.50.
- R. Davidsohn**. Forschungen zur Geschichte von Florenz. 3 Thl. (13 u. 14 Jahr.) Berlin, 1901, E. S. Mittler & Son. xviii, 339 pp. Gr. 8vo. \$2.75. — **Don Dijon**. L'Église abbatiale de Saint-Antoine en Dauphiné. Histoire et archéologie. Grenoble, 1902, Falque & Perrin. 516 pp.; illustrated.
- Camille Enlart**. Manuel d'Archéologie française depuis les temps Mérovingiens jusqu'à la Renaissance. I. Architecture. I. Architecture religieuse. Paris, 1902, Picard. xx, 816 pp.; 405 figs. 8vo. \$3.00. — **G. Fleury**, see **A. Ledru**.
- Van den Ghein**. De Hoofdkerk St. Bavon te Gent (La Cathédrale St. Bavon à Gand). Haarlem, 1902, H. Kleinmann & Co. 12 pp.; 16 pls. Folio. \$6.00. — **J. G. Gilchrist**. An Itinerary of the English Cathedrals for the Use of Travellers. Revised and edited, with an Introduction on Cathedral Architecture, by the Rev. T. Perkins. London, 1900, G. Bell. 91 pp.; 40 illus.; map. Cr. 8vo. \$0.38. — **I. Ronald Sutherland Gower**. The Tower of London. Vol. II. London, 1902, G. Bell & Sons* 202 pp. Gr. 8vo. \$5.25. — **A. Guitard**, see **J. Clément**.
- C. Hallett**. The Cathedral Church of Ripon. A Short History of the Church and a Description of its Fabric. London, 1900, G. Bell. x, 148 pp.; 53 figs. Cr. 8vo. \$0.38. — **N. Hamilton**. Die Darstellung der Anbetung der hl. drei Könige in der toskanischen Malerei von Giotto bis Lionardo. Strassburg, 1901, J. H. E. Heitz. x, 118 pp. 8vo. \$2.00. — **P. Hérard**. Recherches archéologiques sur les abbayes de l'ancien diocèse de Paris. I. Maubuisson; II. Vaux-de-Cernay; III. Notre-Dame-du-Val; IV. Port-Royal-des-Champs. Paris, Helié. v, 197 pp.; portr. and pl. 4to. — **Charles Hiatt**. Westminster Abbey. A Short History and Description of the Church and Conventual Buildings, with Notes on the Monuments. (Bell's Cathedral Series.) New York, 1902, The Macmillan Co. xii, 140 pp.; 47 figs. 12mo. \$0.60.
- F. X. Kraus**. Die Wandgemälde der St. Sylvesterkapelle zu Goldbach am Bodensee. Munich, 1902, F. Bruckmann.
- Charles de Lasteyrie**. L'abbaye de Saint Martial de Limoges. Étude historique économique et archéologique sur la vie du saint. Paris, 1902, Picard. xviii, 512 pp.; 9 pls. Gr. 8vo. \$3.00. — **A. Ledru** and **G. Fleury**. La Cathédrale Saint Julien du Mans. Mamers, 1900, Fleury & Dangin. 200 pls. Folio. \$15.00. — **L. Loye**. Histoire de l'église de Besançon. Jacquin, 1901, T. I. Besançon. 347 pp.; pls. 16mo. — **Vittorio Lusini**. Il San Giovanni di Siena e i suoi restauri diretti dal

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- Émile Male**, *L'Art religieux du XIII^e siècle en France. Étude sur l'Iconographie du moyen âge et sur ses sources d'inspiration*. Nouvelle édition, revue et corrigée. Paris, 1902, Colin. 474 pp.; 127 figs. 4to. — **G. Longo Manganaro**, *Il vero ritratto gottesco di Dante: cronaca della discussione ed osservazioni*. Messina, 1901, V. Muglia. 60 pp. 8vo. — **A. Marignan**, *Études sur l'art français au moyen âge. Histoire de la sculpture en Languedoc au XII^e-XIII^e siècle*. Paris, 1902, Bouillon. v, 143 pp. 8vo. — *La Tapisserie de Bayeux étude archéologique et critique*. Paris, 1902, Leroux. xxvi, 203 pp. 18mo. — **H. J. L. G. Masse**, *The Cathedral Church at Bristol. A Description of its Fabric and a Brief History of the Episcopal See*. London, 1900, G. Bell. 112 pp.; plan and illus. 8vo. \$0.38. — **A. Matthaei**, *Werke der Holzplastik in Schleswig-Holstein bis zum J. 1540. Ein Beitrag zur Entwicklungsgeschichte der deutschen Plastik*. Leipsic, 1901, Seeman & Co. ix, 249 pp., Gr. 8vo; and atlas in folio, iv pp., 46 pls. \$15.00. — **E. F. A. Müntenberger** and **S. J. St. Beissel**, *Zur Kenntniss und Würdigung der mittelalterlichen Altäre Deutschlands. Ein Beitrag zur Geschichte d. vaterländischen Kunst*. Frankfurt, 1901, Peter Kreuer. 16 Lfg. Pp. 169-192; 10 pls. 4to. \$1.50.
- A. Nardini Despotti Mospignotti**, *Il Duomo di San Giovanni oggi battistero di Firenze*. Florence, 1902, Alinari. xii, 181 pp.; 2 pls.; 38 figs. 8vo.
- Gate Pedrick**, *Monastic Seals of the XIIIth Century*. London, 1902, The de la More Press. 158 pp.; 50 pls. 4to. \$5.25. — **F. M. Perkins**, *Glotta (The Great Masters in Painting and Sculpture, edited by G. C. Williamson)*. London, 1902, Bell. xii, 160 pp. 8vo. \$1.25. — **T. Perkins**, *The Cathedral Church of Amiens. A Short History and Description of its Fabric*. (Bell's Handbooks to Continental Churches). New York, 1902, The Macmillan Co. x, 112 pp.; 57 figs. 12mo. \$1.00. — See also **J. G. Gilchrist** — **G. Piccirilli**, *L' Abbazia di S. Spirito di Sulmona e l' Eremito di Pietro Celestino sul Monte Morrone*. Lanciano, 1901, R. Carabba. — **E. Lefèvre-Pontalis**, *Les Façades successives de la cathédrale de Chartres au XI^e et au XII^e siècle*. Caen, 1902, Delesques. 54 pls.; plans. 8vo.
- G. T. Rivoira**, *Le origini della architettura lombarda e delle sue principali derivazioni nei paesi d'oltr' Alpe*. Rome, 1901, Loescher. 2 vols. Vol. I: xvi, 372 pp.; 6 pls.; 464 figs. \$7.00.
- Ing. Dionigi Scano**, *La Cattedrale di Cagliari. Una pagina d'arte Pisana*. Cagliari, 1902, Stab. G. Dessi. — **Ch. Signerin**, *Les quatre anciennes Madones des portes historiques de St. Rambert-en-Forez*. Lyons, 1901, Nouvellet. 56 pp.; 5 pls. 8vo. \$0.25. — **S. J. St. Beissel**, see **E. F. A. Müntenberger**. — **G. Stephens**, *Old Northern Runic Monuments of Scandinavia and England*. London, 1901, Williams & Norgate. Folio. \$5.00. — **R. H. Story**, see **D. Butler**. — **E. F. Strange**, *The Cathedral Church of Worcester. A Description of the Fabric and a Brief History of the Episcopal See*. London, 1900, G. Bell. 117 pp.; 53 figs. Cr. 8vo. \$0.38.

IV. RENAISSANCE AND MODERN

- W. Armstrong**, *Sir Henry Raeburn. With an Introduction by R. A. M. Stevenson, and Biographical and Descriptive Catalogue by J. L. Caw*. London, 1902, Heinemann. New York, Dodd, Mead, & Co. ix, 121 pp.; pls. 4to.
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- da Majano. Nos. 369^a-378: Matteo Civitale. Nos. 379-385: Mino da Fiesole). Munich, 1902, F. Bruckmann. Folio. — Florentiner Bildhauer der Renaissance. Berlin, 1902, B. Cassirer. 350 pp.; 147 figs. Gr. 8vo. \$4.50.
- Carlo Carnesecchi**, Donne e lusso a Firenze nel XVI secolo. Cosimo I e la sua legge suntuaria del 1562. Florence, 1902, Pellas. — **Julia Cartwright (Mrs. Ady)**, Isabella D'Este, Marchioness of Mantua, 1474-1539. A Study of the Renaissance. Illus. Demy 8vo. — **G. Clausse**, Les San Gallo, architectes, peintres, sculpteurs, médailleurs (XV^e et XVI^e siècles). Vol. II: Antonio da San Gallo (le jeune). Paris, 1901, Leroux. 437 pp.; figs. 8vo. \$3.00. — **Rowley Cleeve**, Sir Joshua Reynolds. (Bell's Miniature Series of Painters.) London, 1902, G. Bell & Sons. 67 pp. Small 8vo. \$0.25. — **Maud Crutwell**, Luca and Andrea della Robbia and their Successors. London, 1902, J. M. Dent & Co.; New York, E. P. Dutton & Co. xix, 363 pp.; over 150 illus. Gr. 8vo. — **Lionel Cust**, A Description of the Sketch Book by Sir Anthony Van Dyke, used by him in Italy, 1621-1627. London, 1902, G. Bell & Sons. 29 pp.; 47 pls. Folio. \$10.50.
- Gerard David**, Dit maitre Gerard de Bruges (1450?-1523). Haarlem, 1902, H. Kleinmann. 10 sheets. Text. 20 pls. Gr. 8vo. 4 Lief. at \$1.50.
- Prince d'Essling and E. Müntz**, Pétrarque, ses études d'art, son influence sur les artistes, ses portraits et ceux de Laure, l'illustration de ses écrits. Paris, 1902, Gaz. B. A. viii, 291 pp.; 21 pls.; 191 figs. 4to. — **Exposition des Primitifs Flamands**. Bruges. 1st section: Tableaux. Catalogue. (Preface by W. H. J. Weale.) Bruges, 1902, Desclée de Brouwer & Co. xxx, 155 pp.; 1 fig. 8vo. — **Hubert van Eyck and Jan van Eyck** (1366?-1426) (1370?-1440). Haarlem, 1902, Kleinmann & Co. iv pp.; 40 pls. Gr. folio. \$12.00.
- C. v. Fabriczy**, Die Handzeichnungen Giuliano's da Sangallo. Kritisches Verzeichniss. Stuttgart, 1902, O. Gerschel. iii, 132 pp. 8vo. \$2.50.
- H. Baron v. Geymüller**, Die Baukunst der Renaissance in Frankreich. 2. Heft: Strukture u. ästhetische Stilrichtungen. Kirchliche Baukunst, (Handbuch der Architektur. Unter Mitwirkung v. Proff. Oberbaudir. Dr. Jos. Durm u. Geh. Reg. u. Baur. Herm. Ende hrsg. v. Geh. Baur. Prof. Dr. Ed. Schmitt. II. Tl. Die Baustile. Historische u. techn. Entwicklung. 6 Bd. 2 Heft.) Stuttgart, 1901, A. Bergstrasser. viii, 333-676 pp.; 155 figs. 8vo. \$4.00. — **A. Goffin**, Giorgione. Durendal, 1901, 275 pp. — **G. Gronau**, Aus Raphaels Florentiner Tagen. Berlin, 1902, B. Cassirer. 53 pp.; 18 pls. 4to. — **F.-A. Gruyer**, Chantilly. Les Portraits de Carmontelle. Paris, 1902, Plon. 40 pls. in heliogr. 4to. 100 fr. — **L. Guilbert**, Anciens Dessins des Monuments de Limoges. Limoges, 1902, Ducourtieux. 8vo. — **J. Guiraud**, L'Eglise et les origines de la Renaissance. Paris, 1902, Lecoffre. 351 pp. 18mo.
- S. K. Hartmann**, Moderne amerikani-sche Skulpturen. 1. Lief. Berlin, 1902, Spielmeier. 12 pls. 4to. — **Cecil Headlam**, Handbooks of the Great Craftsmen. Peter Vischer. New York, 1902, The Macmillan Co. xl, 143 pp. 12mo. \$2.00.
- L. Justi**, Konstruierte Figuren und Köpfe unter den Werken Albrecht Dürers. Untersuchungen und Rekonstruktionen. Leipzig, 1902, K. W. Hiersemann. 71 pp.; 8 pls.; 27 figs. Gr. 4to. \$5.00.
- M. J.-Ph. Van der Kellen**, The Works of Michel LeBlond. Reproduced by Photogravure, and accompanied by a Biographical Notice and a Complete Catalogue of his Works. The Hague, Martinus Nijhoff. 1. cloth portfolio, \$30.00 net; in leather portfolio, \$35.00.
- G. H. de Loo**, Bruges, 1902. Exposition de Tableaux flamands des XIV^e, XV^e, et XVI^e siècles. Catalogue critique, précédé d'une introduction sur l'identité de certains maitres anonymes. Gand, 1902, Siffer. lxxvii, 124 pp. 8vo.
- Les Maitres de la Peinture**, 40 Reproductions en Couleurs des Musées de Rome, Florence, Venise, Paris, Amsterdam, Munich, Dresden, Berlin, Londres, etc. Paris, 1902, A. Collin. 35 pls. \$7.00. — **W. Martin**, Gerard Dou. Translated from Dutch by Clara Bell. (Great Masters in Painting and Sculpture.) London,

- 1902, G. Bell & Sons. 164 pp. 8vo. \$1.25. — Glasgow-School of Painting. Introduction by Francis H. Newbery. London, 1902, Bell. 98 pp. 8vo. \$1.50. — **Ernesto Masi**. Vita italiana in un novelliere del cinquecento. Bologna, 1900, Ditta Nicola Zanichelli. — **Quinten Matsijs**. Haarlem, 1902, H. Kleinmann & Co. 36 pls. Gr. folio. \$9.00. — **A. G. Meyer**. Oberitalienische Frührenaissance. Bauten u. Bildwerke der Lombardei. Berlin, 1900, W. Ernst & Son. vii, 294 pp.; 14 pls.; 146 figs. 4to. \$6.00. — **H. Modern**. Giovanni Battista Tiepolo. Vienna, 1902, Artaria. 64 pp.; pl.; figs. 4to. — **E. Molinier**. La Collection Wallace. Meubles et objets d'art français du XVII^e et du XVIII^e siècle. Livr. I. Paris, 1902, E. Lévy. 25 pls. 8vo. To be complete in 4 livrs. \$30.00. — Le Mobilier royal français aux XVII^e et XVIII^e siècles (Histoire et Description). Paris, 1902, Manzi, Joyant, & Co. 10 pts. Gr. 4to. In 100 numbered copies. — **Louis Morand**. Antime de Marcenay de Ghuy, peintre et graveur. Paris, 1902, Rapilly. 60 pp. 8vo. — **E. Müntz**. see *Prince d'Essling*.
F. H. Newbery. see **W. Martin**. — **M. C. Nieuwbarn**. Leven en werken van fra Angelico (Giovanni da Fiesole). Leyden, 1901. 172 pp.; 30 pls. Folio. 30 fl. — **P. de Nolhac**. Tableaux de Paris pendant la révolution française (1789-1792). Paris, 1902, Le Livre & L'Estampe. 15 pp.; 64 pls. Folio.
J. P. Richter. Catalogue of Pictures at Locko Park. London, 1902, Bemrose & Sons. 107 pp. 4to. \$3.13. — **M. Rooses**. Antoine van Dyck. Paris, 1901. Folio. \$20.00. — Rubens, sa vie et ses œuvres. Livr. 1-3. Paris, 1902. 4to.
E. Sheppard. The Old Royal Palace of Whitehall. New York, 1902, Longmans, Green, & Co. 6 pls.; 33 figs. Medium 8vo. — **O. Smeaton**. The Medici and the Italian Renaissance. (World's Epoch Makers.) London, 1902, T. & J. Clark. vii, 286 pp. 8vo. \$0.75. — **E. Steinmann**. Botticelli. (Monographs on Artists, No. 6.) London, 1900, H. Grevel. 112 pp.; 90 figs. 8vo. \$1.00. — **J. B. Supino**. Fra Filippo Lippi. Florence, 1902, Alinari Brothers.
J. C. Van Dyke. Old English Masters. Engraved by Timothy Cole. New York, 1902, The Century Co. Gr. 8vo.
H. Wallis. The Art of the Precursors. A Study in the History of Early Italian Maiolica. London, 1901, Bernard Quaritch. 94 colored figs. Small 4to. \$4.50. — Les Carreaux de pavement italiens du XV^e siècle. London, 1902, B. Quaritch. 40 pp.; 93 figs. 8vo. — **W. G. Waters**. Piero della Francesca. (Great Masters in Painting and Sculpture.) London, 1900, G. Bell. x, 135 pp.; illus. 8vo. \$1.25. — **W. H. J. Weale**. Hans Memlinc. (The Great Masters of Painting and Sculpture, edited by G. C. Williamson.) London, 1901, G. Bell & Sons. xxiv, 110 pp.; 40 pls. 8vo. \$1.25. — Hans Memlinc. Bibliographie; tableaux conservés à Bruges. Bruges, 1901, L. de Plancke. viii, 56 pp.; 2 pls. 8vo. — See *Exposition des Primitifs Flamands*. — **Roger van der Weyden**. Rogier de la Pasture (1400?-1464). Königliches Museum Antwerpen, National-Gallerie London, Louvre Paris, Mauritshuis Haag, Uffizi Galerie Florenz. Haarlem, 1902, Kleinmann & Co. Gr. folio. 20 sheets in 4 Lief., at \$1.50 each.

ARCHAEOLOGICAL DISCUSSIONS¹

SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PERIODICALS

GENERAL AND MISCELLANEOUS

Von Sybel's Ancient Art. — The second edition of LUDWIG VON SYBEL's *Weltgeschichte der Kunst* is, like the original work, an attempt to give the history of ancient art divided according to epochs rather than by ethnological or technical considerations. The purpose of the book is not changed, but the execution is improved. The discoveries and the publications of the past fifteen years are incorporated in the text and the bibliographical notes as well as in the illustrations. The work is thus entitled to a prominent position among the latest publications on the history of ancient art. (LUDWIG VON SYBEL, *Weltgeschichte der Kunst in Altertum. Grundriss*, 2d revised ed., Marburg, 1903, Elwert, xii, 484 pp.; 3 colored pls.; 380 figs., large 8vo., 10 marks.)

Collections of Anthropological Material. — At the Bradford meeting (1902) of the Museums Association of the United Kingdom, HARLAN I. SMITH, of the American Museum of Natural History, New York, presented a paper on 'Methods of Collecting Anthropological Material.' Three methods are employed aiming at the *increase* or the *diffusion* of anthropological knowledge. The first method is a systematic attempt to secure material for original research; the second, an attempt at the systematic illustration of known facts; the third, mere amassing of objects casually found or presented for preservation. Research collecting can best be carried on by the large museums. Synoptic collecting may be done by any museum, and for this the duplicates from the research collections of the larger museums ought to be available. The third method, not being systematic, has only accidental value in preserving what might otherwise be lost.

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor FOWLER, Editor-in-charge, assisted by Miss MARY H. BUCKINGHAM, Professor HARRY E. BURTON, Professor JAMES C. EGBERT, JR., Professor ELMER T. MERRILL, Dr. GEORGE N. OLCOTT, Professor JAMES M. PATON, and the Editors, especially Professor MARQUAND. In Professor Fowler's absence, these departments are conducted by Professor PATON.

No attempt is made to include in the present number of the JOURNAL material published after December 31, 1902.

For an explanation of the abbreviations, see pp. 145, 146.

Prehistoric Mounds of Eastern Turkey. — In *Records of the Past*, I, 1902, pp. 163-171 (8 figs.). ELLSWORTH HUNTINGTON describes the prehistoric mounds of Armenia, which he visited in 1899-1901. The mounds are conical or have the shape of truncated cones. They were evidently made as tombs. Some, at least, of the mound-builders were influenced by the Babylonians, as is evident from their methods of burying the dead in two jars placed mouth to mouth. The mounds seem to be at least as early as 2000 B.C.

The Cults of Olbia. — In a first paper on the cults of Olbia, G. M. HIRST establishes the worship of Apollo, Demeter, and Cybele from coins and literary references, and discusses that of Achilles, which he regards as of purely Greek origin. (*J.H.S.* XXII, 1902, pp. 245-267; 6 cuts.)

Hellenism in Bactria and India. — In 'Notes on Hellenism in Bactria and India,' *J.H.S.* XXII, 1902, pp. 268-293, W. W. TARN concludes that the evidence of coinage for a Greek influence through Bactria upon India is not conclusive, and that all probabilities point to the absorption and disappearance rather than the extension of any Hellenic element left in that region.

Graeco-Buddhist Sculptures. — In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 39-64 (2 pls.; 9 figs.). A. FOUCHER publishes a series of sculptures from Peshawar, Bouriér, and the valley of the Svât in northwestern India. They were brought to France by an expedition carried out in 1895-97 and are now in the Louvre. The statues represent Buddhas and Bodhisattvas; the reliefs, subjects from the life of Buddha and other religious legends in addition to purely decorative motives, such as tritons and cupids. The mixture of Buddhist religion and late Greek artistic training gives these works a peculiar interest. The sculptures belong to the first centuries after Christ, a time when sculpture was much practised in the whole Roman Empire and when sculptors from Egypt or western Asia might easily carry on their trade as far away as India. Some of the reliefs show qualities similar to those of early Christian work. The practice of representing Buddha and the sacred legends in sculpture seems to have been introduced into India by these Graeco-Roman artists.

Ancient Models of Buildings. — In *Jh. Oesterr. Arch.* I. V, 1902, pp. 175-195 (11 figs.). O. BENNDORF writes of ancient models of buildings. Such models were common in the period of the Renaissance, and their existence can be traced back through the Middle Ages in uninterrupted tradition to ancient times. Benndorf publishes several coins and reliefs on which models of buildings are represented, sometimes held in the hand of a person, perhaps as a votive offering. A part of a model of a building has been found at Ephesus. As extant it represents the roof and part of the entablature. It was carved in the round from the marble, but was evidently intended to be placed against a background and seen only from one side, like a relief. The article closes with a discussion of the grave relief of Attalus, son of Asclepiodorus, from Cyzicus (FRÖHNER, *Inscriptions grecques du Louvre*, No. 170). The round object held by the handmaid is perhaps a model of a round building with columns. This is, however, not certain, and at any rate the model is not to be connected with the Arsinoeion.

The Mithraic Liturgy. — In *The Open Court* (Chicago), November, 1902, pp. 670-683 (3 figs.). FRANZ CUMONT describes the liturgy, clergy, and devotees of the cult of Mithra. The article is in a measure an abstract

of the author's *Textes et Monuments figurés relatifs aux Mystères de Mithra* (Brussels), and describes, as far as the known material permits, the admission of the worshippers to the seven degrees of advancement, the associations of devotees, the forms of worship, and the important part played by the priests.

The French Schools at Athens and Rome.—In *C. R. Acad. Insc.* 1902, pp. 509–521, is a report by MAXIME COLLIGNON on the activity of the French schools at Athens and Rome in the year 1900–01. The report mentions the theses and papers presented by the members of the schools and refers to the good results of the new regulations at the Athenian school.

An Enamelled Fish-shaped Fibula.—In *Reliq.* VIII, 1902, pp. 274–276 (3 figs.), F. W. READER publishes a fibula found in the bed of the Wall Brook, near the street known as London Wall. It has the form of a fish, is made of bronze, and inlaid with black and white enamel. An almost identical fibula was found at Rotherly. Other similar monuments of Roman art are cited.

Monuments of Algeria.—An important work has been published under the auspices of the general government of Algeria. It is written by the director of the Museum of Algiers—a man who is thoroughly conversant with the ancient monuments of the country. The text exhibits a thorough study of the rapidly accumulating literature on this interesting branch of Roman and early Christian antiquities. The author has handled his material in a most systematic manner, treating of the military, religious, civil, and funerary monuments with a keen sense for distinctions of form and period. (S. GESELL, *Les Monuments Antiques de L'Algérie*, Paris, 1902, Fontemoing, Vol. I: viii, 290 pp.; 72 pls.; 85 figs. Vol. II: 445 pp.; 34 pls.; 89 figs. Svo.)

EGYPT

A Tablet-case from Thebes.—In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 105–119 (2 pls.), GEORGES BÉNÉDITE publishes a bronze tablet-case from Thebes, now in the Louvre. It is of bronze, with incrustation of gold, silver, platinum, and enamel. Besides a religious scene and symbols, it has two inscriptions showing that it is a gift from Horon, chief of the scribes, to the divine spouse Shapenonapit, adopted daughter of the divine adoresse Ameniridia. Another similar case, a forged copy of which the author had seen, is cited in comparison. The adoption of princesses of the Tanite, Bubastite, Ethiopian, and Saïte dynasties by princesses of the Ramesside dynasty gave those adopted the seal of legitimacy. The special occasion for which these cases, which contained ivory tablets, were made is not determined. *Ibid.* pp. 121–141, M. BERTHELOT describes the metals of the case in the Louvre and the methods of incrustation.

The Worship of Serapis.—In *C. R. Acad. Insc.* 1902, pp. 420–421, is a summary of a paper by BOUCHÉ-LECLERCQ on the origin of the cult of Serapis. The conclusions reached are: (1) A distinction must be made between the institution of the cult of Serapis and the importation of his statue; (2) the Alexandrian cult of Serapis is an adaptation of the Memphite cult of Osar-Hapi, accomplished under Ptolemy Soter; (3) the "Babylonian Serapis" mentioned by Plutarch and Arrian is a Chaldaean deity not connected with Serapis nor with Sinope; (4) the so-called Egyptian statue, made in the times of Sesostris by a legendary Bryaxis, is the

Greek statue by the historical Bryaxis; (5) the discordant traditions concerning the place from which the statue was imported are mere conjectures, as its real origin was intentionally concealed by the founders of the cult; (6) of these traditions, that which makes the statue come from Sinope (Plutarch and Tacitus) is the latest, and its probable author is Apion; (7) the statue by Bryaxis may have been a Hades from some Plutonium in Asia Minor, or the Asclepius from Cos (Pliny, *N.H.* XXXIV, 73) imported by Ptolemy Philadelphus; (8) the story of the cast of a statue of Cora tends to show that the statue of Isis as companion of Serapis was made at Alexandria. By this addition, Serapis ceased to be exclusively the city god and became a part of the pair, Osiris-Isis, in Egyptian fashion.

Disguised Inscriptions. — In *R. Arch.* XLI, 1902, pp. 26-101, SEYMOUR DE RICCI discusses a Coptic epitaph and an epitaph which he shows is Greek, both published by J. Clédat in the *Bulletin de l'Institut Français d'Archéologie Orientale*, I, 1901, pp. 87 ff. He also shows that *C.I.G.* 4706, and *C.I.G.* IV, 9863, are Coptic.

Alexandrian Grave Reliefs. — The first attempt at a catalogue of the Alexandrian grave reliefs is made by E. PFUHL, *Athen. Mitth.* XXVI, 1901, pp. 258-304 (1 pl.; 18 cuts). The monuments of Ptolemaic times are found only in the great cemeteries of Alexandria, while the Roman reliefs are found also in other parts of Lower Egypt. Two forms are used: the simple stele with gable top and a sunk panel for the relief; and the naiskos, in all its gradations, from the stele on which the field is merely marked off by pillars to the fully developed shrine in relief. The material is seldom marble. Commonly the native limestone is used, and the defects of the stone filled with plaster and concealed by paint. The use of color, which is noted with great care, does not differ essentially from that found on the "Alexander sarcophagus." Inscriptions on the Hellenistic stelae are so very rare, that it is probable that they were usually painted, but on the Roman monuments are more common and contain at least the name and age, and often more. The monuments described are classified as follows: A. Hellenistic Types. I. Groups. (a) Earlier Series. Nos. 1-14. Noteworthy are No. 1, which is of Pentelic marble and evidently the work of an Attic artist, and No. 7, the death of a mother, which is marked by a pathos not found on the Attic reliefs. (b) Later Series. Nos. 15-20. This series is characterized by the types and workmanship of the late Hellenistic time. II. Single Figures. (a) Seated. Nos. 21 and 22 of women; No. 23 of a man, noteworthy, in spite of its small size, for the expressive likeness. (b) Standing. Nos. 24-28 of women; Nos. 29-39 of men. In this series some of the reliefs are marked by strong Egyptian influence. III. Hero Reliefs. Of these Nos. 40 and 41 show a youth before an upright serpent, while Nos. 42 and 43 are funeral feasts. B. Roman Types. These are almost all of small size, and show only two designs: the standing figure *en face*, and the funeral feast. The chief varieties of the types are noted, but no catalogue of these numerous monuments is attempted. A brief review of the development of the types of sculpture in the Alexandrian grave reliefs concludes the article.

The Orientalistische Literatur-Zeitung. — The *R. Arch.* XLI, 1902, pp. 336-342, contains a list of articles relating to Egyptology which have appeared in the *Orientalistische Literatur-Zeitung* since its beginning in 1898.

BABYLONIA AND ASSYRIA

The Cylinder A of Gudea. — In *C. R. Acad. Insc.* 1902, pp. 360-412, JULES OPPERT gives a transliteration and translation, with introduction and notes, of the cylinder A of Gudea. This records a vision of Gudea, in which he is admonished by the god Ningirsu to build a temple. Gudea relates also a dialogue between himself and the goddess Anunit, and records his piety toward the goddess Bau and the promises made him by the gods. The language of the inscriptions of Gudea shows no trace of Semitic (Assyrian) influence. The difficulty of reading Sumerian texts is great, partly on account of the different values given by the Assyrians to the same signs.

The Code of Hammurabi. — In the *Independent*, January 8, 1903, the first part of the code of laws issued by Hammurabi, king of Babylon, about 2250 B.C., is published in an English translation of Winckler's German version. Some biblical parallels are added. *Ibid.*, December 25, 1902, and January 1, 1903, the discovery by de Morgan, at Susa, of the stele containing the code is described and Hammurabi and his empire discussed. The publication of the code is continued in subsequent numbers of the same magazine.

Babylonian Statuettes with Incrustation. — In *Mon. Méin. Acad. Insc.* VII, 1900, pp. 7-11 (1 pl.; 2 figs.), LÉON HEUZEY publishes a statuette of a recumbent man-headed bull of dark steatite and a bronze statuette of a bull. The former still has remains of incrustation with shell, the latter is incrustated with silver. Two fragments of similar work, which was known as early as the times of Gudea, are represented in cuts.

The Mystic Squares of the Chaldaeans and 653. — In *C. R. Acad. Insc.* 1902, pp. 457-468, J. OPPERT discusses two arithmetical inscriptions found at Sippara and published by V. Scheil. One of these offers the problem to make a plan of a building, the surface of which shall equal the square of the sacred number 653, and shall be composed of four squares and a rectangle. The cyclic number 653, called the period of the phoenix, was composed of a Sothiacal period of 292 lustra and a lunar period of 361 lustra. The meaning of this mystic arithmetic when applied to buildings was to give them as many years of endurance as the mystic numbers denote. The chronology of Genesis is based upon the period of the phoenix. From the deluge to the birth of Abraham is 292 years, and from that time to the end of Genesis is 361 years, in all 653 years.

Inscription of Sargon II. — In the *Catholic University Bulletin*, VIII, 1902, pp. 522-525 (2 pls.), JAMES F. DRISCOLL publishes an inscription of uncertain origin, now in the possession of Father Hyvernât. It records campaigns of an Assyrian king against Babylon, Elam, and other countries, the names of which are lost. It is dated in the year of a governor of Samaria, the fourteenth year of the king whose name is lost, but who can be no other than Sargon II (722-705 B.C.).

Bilingual Greek and Cuneiform Tablets. — In *S. Bibl. Arch.* XXIV, 1902, pp. 108-119 (8 figs.), T. G. PINCHES publishes five bilingual tablets in the British Museum and one in Berlin. They are further discussed by A. H. SAYCE, *ibid.* pp. 120-125, and F. C. BURKITT, *ibid.* pp. 143-145. The Babylonian (Sumerian) text is accompanied by a transcription (not a translation) in Greek characters, which gives the pronunciation current at a time between 140 and 80 B.C. (Cf. *R. Arch.* XLI, 1902, pp. 132-134.)

SYRIA AND PALESTINE

The Ark of Jehovah.—In *Jh. Oesterr. Arch.* I. V, 1902, pp. 171-174 (1 fig.), is a reprint of the last article by the late W. REICHEL (from *Theologische Arbeiten aus dem rheinischen wissenschaftlichen Predigervereine*, Neue Folge, Heft V, pp. 28 ff.). The ark (Exodus xxv, 10 ff.) is explained as a chest, the top of which was finished to form a seat (the mercy seat), which was the throne of Jehovah. In the sides of the ark were rings, through which staves were passed by which the ark could be carried.

False Shekels.—In *Reliq.* VIII, 1902, pp. 233-242 (10 figs.), G. F. HILL discusses a number of false shekels after first describing and illustrating the genuine shekels ascribed to the time of the first revolt against Rome (spring 66-67 to autumn 70-71 A.D.).

Phoenician Stelae.—In *C. R. Acad. Insc.* 1902, pp. 200-205 (2 pls.), LÉON HEUZEY publishes two Phoenician stelae. The first represents the upper part of a draped female figure. The right hand is raised in adoration, and on the left hand is a small couchant sphinx with a little cup between its paws. This cup was no doubt a sort of censer or other utensil for a religious purpose. The stele shows strong Greek influence, mingled with Egyptian forms, and belongs to a time not much before Alexander the Great. The other stele is more decidedly Greek and is of somewhat later date. Its main relief represents a draped female figure whose head is now missing. Below this, two female figures in crouching posture are watering a plant from urns held in their hands. The watering of the sacred plant is a ceremony of Babylonian origin. The plant here represented resembles, however, the papyrus of Egyptian monuments. Translations of two dedicatory inscriptions from Oum-el-awamid are added.

A Mounted Syrian Deity.—In *C. R. Acad. Insc.* 1902, pp. 190-200 (1 pl.), LÉON HEUZEY publishes a Syrian relief of late Graeco-Roman times representing a mounted male deity holding a whip in his right hand. It is dedicated to the god Genneas, whom Heuzey identifies with a god Gennaïos worshipped at Emesa under the form of a betyl, at Baalbek under that of a lion. The whip is a common attribute of the god called by the Romans Jupiter Heliopolitanus and of other solar deities. Another Asiatic mounted deity is carved in the rock not far from Baalbek. *Ibid.*, pp. 472-473 (more fully in *Recueil d'Archéologie Orientale*, V, pp. 154-163), C. CLERMONT-GANNEAU discusses the inscription (ΘΕΩΓΕΝΝΕΑΤΤΑΤΡΩΩ ΜΑΖΑΒΒΑΝΑΚ ΚΑΙΜΑΡΚΟΚΥΙΟC ΑΥΤΟΥ ΑΝΕΘΗΚΑΝ, etc.). He thinks Mazabbanus and his son were dependents or descendants of Genneas and made the offering to "the god of Genneas."

A Relief from Emesa.—In *C. R. Acad. Insc.* 1902, pp. 235 f., FATHER RONZÉVALLE publishes (pl.) a relief of Roman date found at Emesa (Homs). Three deities are represented: (1) A god with rays about his head, clad in a military costume resembling that of Roman emperors, (2) a draped goddess carrying a sceptre, and (3) a draped deity armed with a lance. The inscription gives the names of the deities Iarebolus, Aglibolus, and Sem . . . Above the second figure is, moreover, the name Ἀθηνᾶ and above the third Κεραυνῶ.

An Expedition into the Syrian Desert.—In *C. R. Acad. Insc.* 1902, pp. 251-264, RENÉ DUSSAUD gives a summary report of an expedition into

the desert of Syria in 1901, from which he brought back copies and squeezes of nine hundred new Safaitic inscriptions, sixteen Nabataean inscriptions, 167 Greek and Latin inscriptions, and thirty-four Arabic inscriptions.

A Nabataeo-Arab Inscription. — In *R. Arch.* XLI, 1902, pp. 409-421, RENÉ DUSSAUD discusses an inscription from En-Nemära, in the Syrian desert. The writing is closely akin to the Nabataean alphabet, but the language is Arabic. The date is 223, i.e. 328 A.D. The inscription marks the tomb of a conqueror, Imrou'qais, who placed his tribes as cavalry at the service of the Romans. Both epigraphically and historically the inscription is interesting.

Antiochus the Great. — The epithet "Great" of Antiochus III is not a personal surname, but a reminiscence of the title Great King which he bore, as a rare exception among the Seleucidae, because of his eastern Babylonian dominion. This title, originally that of the Achaemenid kings, always retained the pretence of a claim upon their territorial domain, which, in its late and very attenuated form, is paralleled by both continental and English copying of Greek and Roman imperial titles. The plain title of βασιλεύς, borne by most of the Seleucids and other followers of Alexander, means king of Macedonia, no division of the empire of Alexander being recognized in theory. (E. R. BEVAN, *J.H.S.* XXII, 1902, pp. 241-244.)

ASIA MINOR

Troy and Ilium. — The excavations and investigations at Hissarlik were finally completed by Professor Dörpfeld and his collaborators in 1894. The results, not only of the last season's work, but of all the previous excavations conducted by Dr. Schliemann and others, are now published in accessible and convenient form. This book does not claim to settle all questions connected with Troy and Ilium, but it gives all the material, so far as it is supplied by the site itself, and contains also not a little discussion of the questions at issue. It is henceforth the one indispensable work on the subject. [*Troja und Ilium: Ergebnisse der Ausgrabungen in den vorhistorischen und historischen Schichten von Ilium, 1870-1894, von WILHELM DÖRPFELD, unter Mitwirkung von ALFRED BRÜCKNER, HANS VON FRITZE, ALFRED GÖTZE, HUBERT SCHMIDT, WILHELM WILBERG, HERMANN WINNEFELD.* Athens, 1902, Beck & Barth, 2 vols., pp. xviii, 1-428, 429-652; 8 folded plans (Tafeln); 66 pls. (Beilagen); 471 figs.: 4to; 810.00.]

Clazomenian Sarcophagi. — In the mouldings and painted decoration of the trapezoidal sarcophagi from Clazomenae, M. MEYER finds proof that they were designed to be set up on end, uncovered, to hold the dead body in an upright position, probably during the funeral ceremony. This use seems to be derived from that of the Phoenician stone sarcophagi and through them from the Egyptian mummy cases, though both of these were closed and represented the dead by their own shape and painted decoration. The rectangular sarcophagi of Clazomenae indicate a quite different usage, whether contemporary or not. (*Jb. Arch. I.* XVII, 1900, pp. 65-68; 3 cuts.)

The Temple of Aphrodite Stratoniceis at Smyrna. — In the *Recue des Etudes Anciennes*, IV, pp. 191-193, ARISTOTE FOSTRIER gives reasons for supposing that the site of the temple of Aphrodite Stratoniceis at Smyrna was near the hospital founded by Baron Rothschild. In an appendix

(pp. 193-195) he publishes six unimportant inscriptions from Smyrna and the neighborhood. Four other Greek inscriptions from Asia Minor are added, *ibid.* pp. 238-239.

Dekaprottoi and Eikosaprottoi. — In *Jh. Oesterr. Arch.* I. V, 1902, pp. 197-207, E. HULA discusses the titles *δεκάπρωτος* and *εικοσάπρωτος*. He publishes an inscription from Ernez (Arnei), in which a certain Demetrius is said to have been *δεκάπρωτος* until the establishment of *εικοσάπρωτοι*, after which he was *εικοσάπρωτος*. The change is found to have taken place in the early part of the second century after Christ. The *δεκάπρωτοι*, and presumably the *εικοσάπρωτοι*, had to do with the revenues. The office was not held for life, but the same person often held it for many years. The results are obtained by the study of many inscriptions, among them that published in *Athen. Mith.* XXIV, p. 232, No. 71, very imperfectly published in *C.I.G.* 3491.

The Inscriptions from Akmonia. — In the *Revue des Études Anciennes*, IV, 1902, pp. 267-270, W. M. RAMSAY publishes remarks with corrected readings of the inscriptions from Akmonia and Erjish. (See *Am. J. Arch.* VI, 1902, p. 201.)

GREECE

ARCHITECTURE

The Tholos at Epidaurus. — In *Hermes*, XXXVII, 1902, pp. 483-485, W. DÖRPFELD states that the puteal in the tholos at Delphi is a hole made at a late date in the floor of the structure. The fact that the pedestal which once stood in the centre of the tholos is hollow does not show that it stood over a well. Other hollow pedestals are cited. There is therefore no longer any reason to suppose that there was a puteal in the tholos at Epidaurus. The centre of the building was occupied by a round altar.

The Rooms of the Erechtheum Again. — In *Jh. Arch.* I. XVII, 1902 (pp. 81-85), A. MICHAELIS continues his controversy with E. Petersen as to the disposition of the objects seen by Pausanias in the west half of the Erechtheum. The double thickness of the floor and the narrow shape of the westernmost chamber *D*, he cites as proof that this was an antechamber or entrance hall with the cistern, *θάλασσα*, beneath it, and that the adjoining room *C* contained the three altars, the wall paintings, and the steps leading down to the trident mark. He adds, from a new fragment of an inscription, suggestions as to the priestess' name given in Pausanias manuscripts as *Εὐήρης* and the basis which has been assigned to her statue.

SCULPTURE

The Rampin Head. — In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 143-151 (1 pl.), HENRI LECHAT publishes more accurately than any one has done hitherto the well-known head in the Louvre. In a brief discussion he shows that it is an Attic work of about the middle of the sixth century B.C., not later than 540 B.C.

Ancient Heads of the School of Phidias. — In *Gaz. B.-A.* XXVIII, 1902, pp. 449-470 (22 figs.), S. REINACH shows that the sculptures of the Parthenon are evidently the work of one well-established school — the school of Phidias. The relation of the master to these works was similar to that of Raphael to the paintings of the *loggie* of the Vatican. The head

of the Nike from the western pediment of the Parthenon, now in the Laborde collection in Paris, forms the starting point for a study of the style of Phidias as seen in the human head. The eyes in particular, not staring, like those of archaic heads, nor languishing, like those of Praxitelean works, are characteristic. These are studied in detail. The representation of hair is also characteristic. These criteria compel us to attribute to the school of Phidias the following heads: Aphrodite at Oxford (Michaelis, *Ancient Marbles*, Oxford, No. 59); Aphrodite at Corneto: bronze head with a tall mural crown, in the Cabinet des Médailles, Paris; head of the so-called suppliant, in the Barberini palace (*Mon. dell' Istituto*, IX, 34); head of Zeus, in the Ny-Carlsberg Glyptothek. The siren in the museum at Athens (Baumeister, *Denkm.* III, p. 1644, fig. 1701; Arndt-Bruckman, *Denkm.* No. 549) stands between the school of Phidias and the time of Scopas and Praxiteles. The bronze bust of an Amazon in Naples is Polyclitan. The bronze statuette of Athena from Ettringen, now in the Museum of Fine Arts in Boston, though a Roman work, is a reduction of a copy of the Athena Promachos of Phidias.

A Head of Athena Parthenos. — In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 153-173 (1 pl.; 6 figs.), ÉTIENNE MICHON publishes and discusses a marble head of Athena Parthenos found in 1895 near Civita Vecchia and now in the Louvre. The head was made to be set into a statue. The nose and many details of the ornamentation of the helmet are broken off. Enough remains to show that the front of the helmet was decorated with figures of animals carved almost entirely in the round. Other heads of the Athena Parthenos, especially the head of the Minerve au Collier and a head in Cologne, are discussed.

The Bronze Statute from Ephesus. — In *Jh. Oesterr. Arch.* I. V, 1902, pp. 214-216 (1 fig. = *Am. J. Arch.* 1902, p. 352), F. HAUSER suggests that the bronze Apoxyomenus from Ephesus is a work of Daedalus, son of Patrocles and grandson of Polyclitus. In Ephesus, an inscription (LOEWY, *Inscr. gr. Bildh.* No. 88) was found mentioning Daedalus, son of Patrocles; the youthful Apoxyomenus was found at Ephesus; Pliny (*N.H.* XXXIV, 76) mentions two bronze statues by Daedalus, son of Patrocles, *pueros duos destringentes se*. The second statue is represented by the statuette from Frascati, published by Hartwig, *Jh. Oesterr. Arch.* I. 1901, p. 157.

Bronze Statuette of a Hoplitodromos. — In *Jh. Oesterr. Arch.* I. V, 1902, pp. 165-170 (1 pl.; 3 figs.), W. HARTWIG publishes a bronze statuette from Capua, now in the imperial collection in Vienna. It represents a nude youth on whose head is a helmet with a large crest. The feet are lacking. Although there is no trace of a shield, the figure is explained as a hoplitodromos, and the posture shows that he is about to start in the race. The statuette was probably made in Campania. Two examples of running hoplitodromoi represented as bearings on shields are added to the six already known. The sign that looks like an A with oblique cross line, which is represented on some shields in vase paintings, is explained as a shield holder, not a number.

A Relief representing a Poet. — During the German excavations on the west slope of the Acropolis there was found a fragment of a small relief, representing a bearded man, wrapped in his mantle, seated on an arm-chair, and looking thoughtfully at some object or person which must have occupied

the missing left-hand portion of the relief. The style indicates a date near the end of the fourth century B.C. The figure shows a strong resemblance to the later typical group of a poet seated in contemplation before a large mask. The type is to be distinguished from the very similar one representing a beardless actor holding or receiving a mask. The size of the fragment and the curves in the folds of the curtain warrant the belief that the missing portion contained the figure of a Muse holding the mask before the poet. The relief therefore belongs to that class of votive offerings in which the dedicatory is represented with the object dedicated, which, in the case of a dramatist, might well be a mask. (E. KRÜGER, *Athen. Mitth.* XXVI, 1901, pp. 136-142; 1 pl.; 3 cuts.)

The Pothos of Scopas. — In *Sitzb. Mün. Akad.* 1901, V, pp. 783-786, A. FURTWÄNGLER explains the so-called Apollo with the water-bird as the Pothos of Scopas. A torso in Candia shows traces of wings, and the best of the replicas of the statue in Florence also shows such traces. The same statue is represented on the Berlin gem published by Furtwängler, *Antike Gemmen*, pl. xliii, 52. (Nr. 8199 in Furtwängler's *Beschreibung der geschnittenen Steine in Berlin*.)

Casts of Statues and the Serapis of Bryaxis. — In *R. Arch.* XLI, 1902, pp. 5-21, S. REINACH, starting with a passage in Plutarch, *De Solert. Animal.* 36, in which it is stated that a statue of Serapis at Alexandria was brought from Sinope and that a cast was made from a statue of Cora at the same place, discusses the making of plaster moulds in antiquity. The chief passage relating to the subject is Pliny, *N.H.* XXXV, 151 ff. Some words (from 153) have to be transposed to 151. Pliny (or his authority) intends to ascribe to Butades the modelling of portraits in clay (151), the use of clay models for statues (153), modelling in red clay, and making masks as tile-fronts (152). The remark that modelling in clay is earlier than casting in bronze is added to what is said of clay models for statues. To Lysistratus Pliny ascribes the first plaster moulds taken on the actual features, the first exact portraits, and the first casts of statues. The passages relating to the Serapis at Alexandria are discussed. There were two statues of Serapis there: (1) a colossus of blue or green color attributed to the times of Sesostris and brought into connection with Sinope, a colony of Sesostris, and (2) a statue of Greek style, representing Hades with Cerberus. This was brought from Seleucia under Ptolemy III, and was probably a work of Bryaxis. Beside it stood, probably, an Isis adapted from a Greek Cora.

An Attic Grave Relief. — In *Jh. Oesterr. Arch.* I. V, 1902, Beiblatt, coll. 137-138 (1 fig.), L. BÜRCHNER publishes an Attic grave relief similar to those published by Conze, *Attische Grabreliefs*, LV, 207 and LIX, 239, but later. A seated woman, Plathane, is holding the hand of a man, Manis, who stands before her.

A Portrait of Antiochus Soter. — In *Jh. Arch.* I. XVII, 1902 (pp. 72-80; pl.: cut), B. GRAEF discusses the proper use to be made of coins in identifying sculptured portraits, and in particular shows that the Vatican head of an elderly Hellenistic prince, once known as Augustus, is that of Antiochus I. The heads, he says, should be studied in front as well as side view and compared with the coin portraits rather in their entirety than feature by feature.

A Ganymedes at Nîmes. — In *R. Arch.* XLI, 1902, pp. 1-4 (1 pl.), H. LUCAS publishes and discusses the fragmentary group in the museum of the Maison Carrée at Nîmes, first published in outline by Reinach, *Répertoire de la statuaire*, II, p. 812, No. 1. A boy and a dog are represented, but evidently the boy is not playing with the dog. The writer interprets the groups as Ganymedes about to be carried off by the eagle. He cites, in comparison, the Ganymedes of Leochares and the "Ilioneus" in Munich. The group is a Hellenistic work, perhaps of the Pergamene school.

The Equestrian Statue from Melos. — In *R. Arch.* XLI, 1902, pp. 207-222 (2 figs.), S. REINACH discusses the equestrian statue found at Melos in 1878 with other works. (See *Am. J. Arch.* 1901, pp. 465-468.) The equestrian statue was taken to Athens in 1901, and is probably now in a store-room of the museum. Of the rider the head, arms, and lower parts of the legs are gone, while the horse lacks his legs, neck, and part of his tail. His head has been found. The pedestal has a Greek inscription of the second century after Christ. (See *I. G. Ins.* III, p. 209.) The equestrian statue shows the existence of a school of sculpture at Melos in the second century after Christ. The Poseidon and the two female statues found in 1878 are probably works of this school. The base with the inscription of Theoridas, belonging to the fourth century B.C., may have been the base of a statue of Poseidon, but not of the Poseidon found in 1878. Nor is it the base of the headless male statue found at the same time. None of these works has any connection with the Aphrodite, nor has the youthful Heracles which Voutier saw on the lost base with the inscription of the sculptor from Antioch on the Maeander. This inscription belonged not to the Aphrodite, but to another statue which was grouped with a term of Heracles.

The Praying Boy of the Berlin Museum. — In *Röm. Myth.* XVII, 1902, pp. 101-106, A. MAU argues that this bronze, which he thinks is on the whole rightly restored, represents no attitude of prayer, but is a ball player depicted at the moment of catching a ball thrown to him by another player.

The Venus de' Medici. — At a meeting of the Académie des Inscriptions, August 1, 1902, S. REINACH tried to prove, by the aid of new documents, that both arms and both legs of the Venus de' Medici are restored, that the head has been much worked over, that the dolphin is modern, and that the inscription is a somewhat modified copy of a genuine inscription, which was known in the sixteenth century, but was not the signature of the artist of the Venus. (*C. R. Acad. Insc.* 1902, p. 440.)

A Statue of Venus sent to Francis I. — In *R. Arch.* XLI, 1902, pp. 223-231, ÉMILE PICOT publishes several documents and epigrams of the sixteenth century relating to a statue of Venus sent by Renzo da Ceri to King Francis I of France in October, 1530. It was found probably in the kingdom of Naples, held an apple in one hand, and was evidently much admired.

VASES

Bronze-age Vases from Zakro. — Three vases recently found at Zakro, Crete, are published by D. G. HOGARTH in *J.H.S.* XXII, 1902, pp. 333-338 (pl.; 3 cuts). Their remarkable naturalism in marine and floral subjects seems to show that Crete is the real home of this tendency

in Aegean art and that only the later and more conventionalized work is native at Mycenae and Ialysus.

Some Boeotian Vases.—In *Athen. Mith.* XXVI, 1901, pp. 143-156 (1 pl.; 4 cuts), SAM WIDE discusses a local type of Boeotian vases, which is represented by five specimens, three in Athens and two in the British Museum. The place of discovery is not certainly known, but in three cases is said to be Tanagra, and the technique shows affinities to Boeotian ware. The clay is pale yellow passing into red; the color is blackish brown and is applied with a coarse brush, the figures being drawn in outline. Of special interest is No. 5, a plate containing a representation of a seated goddess, holding a torch in her right hand and poppies and wheat in her left. In front of her is an oblong rounded object, which seems to be an altar in the form of a *tymbos*. In the field behind the throne of the goddess is a bird. This seems to be the cult statue of a chthonic deity, either Demeter or Persephone. As the makers of these vases do not use ornaments merely to fill space, the bird must have some religious significance, and is to be referred to a conception common enough among other races, but of which only scanty traces are left in Greek literature—the conception of the soul as a bird. Here the idea has undergone the same transformation as is seen in the case of the Sirens, and the bird no longer represents the soul itself, but is a *daimon* of the lower world, sent by the goddess to bring the souls to her kingdom.

A Cantharus from the Factory of Brygos.—In the *Decennial Publications* of the University of Chicago, Vol. VI, pp. 7-9 (1 pl.; 1 fig.), FRANK B. TARBELL publishes a cantharus in the Boston Museum of Fine Arts. (See *Annual Report* of the Museum, 1895, p. 20, No. 24; *Arch. Anz.* 1896, p. 96, No. 24.) On one side a bearded male figure is in pursuit of a woman, on the other a bearded male is pursuing a boy who carries a hoop. The scenes are interpreted as the pursuit of Aegina and Ganymedes by Zeus. The workmanship, the use of brown for hair and anatomical markings, the representation of hair on the body, the dotted clothing, and other details show that the painting is the work of Brygos (or the man who painted the vases signed *Βρύγος ἐποίησεν*).

A Greek Vase found at Susa.—In *C. R. Acad. Insc.* 1902, pp. 428-438 (2 figs.), E. POTTIER discusses a fragmentary vase found by de Morgan at Susa. The vase had the form of a horse. Under the horse and between his forelegs was a figure in Oriental costume, probably an Amazon. The vase is Attic, of fine workmanship, and evidently belongs to the times of Euphronios. It was probably made between the battle of Marathon and the taking of Athens by the Persians, and some Persian soldier carried it home. The conquered Amazon is symbolical of the Persian defeat at Marathon.

Heracles in the Bowl of Helios.—In *Röm. Mith.* XVII, 1902, pp. 107-109 (1 pl.), P. HARTWIG publishes the second known representation of Heracles in the bowl of Helios. It is upon a black-figured Attic vase, acquired by the author in 1902 in southern Italy. Heracles sits balanced over the edge of a large bowl, with his legs dangling outside, floating over the waves to the right. He wears the lion skin and a short tunic, has a sword girt at the left side, and the bow and quiver slung over his back. In his right hand he grasps his club, while his left is raised in a gesture of surprise, while he looks backward, as if toward the sun god. (The other known

representation of the same subject is on a cylix in the Museo Gregoriano of the Vatican. *Mus. Greg.* II, 74, 1; Gerhard *A.V.* 109; Roscher *Lex. Myth.* I, 2204.)

A Red-figured Vase from Eleusis. — In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 29–37 (1 pl.; 1 fig.), A. SKIAS publishes a red-figured vase (skyphos) found at Eleusis and now in the National Museum at Athens. The vase is much broken and parts of it are lost. On the front Triptolemus is represented seated on a winged chair. Demeter stands before him and holds out to him a few stalks of wheat. Behind him stands Cora with a torch. An inscription on each side of the vase reads *Δημητρία Δήμητρ[ρι ἀνέθ]ηκεν*. White and gilt are used sparingly. Little remains of the scene on the back of the vase, which may have been Triptolemus tilling the soil, but this is very uncertain. The vase belongs to the fourth century B.C.

A Red-figured Amphora. — In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 13–28 (2 pls.; 2 figs.), A. DE RIDDER publishes and discusses a red-figured Attic amphora in the Cabinet des Médailles, in Paris. (BABELON, *Guide illustré au Cabinet des Médailles*, p. 264.) The shoulder of the vase is adorned with a palmette pattern. Round the belly runs a broad band upon which are represented Dionysus, two Sileni (horse-tailed Satyrs), and eight Nymphs or Maenads. The drawing is fine and careful, but the action of the different persons is not properly related. The vase belongs to the time about 470 to 460 B.C., when vase painters were advancing beyond the "severe style" under the influence of the dramatic and picturesque style of Polygnotus.

Actor and Astyoche. — An inscribed skyphus from the Bourguignon collection, now in Boston, has on one side "Nestor" and "Euaechme," whose name is new; on the other "Actor" and "Astyoche," a young woman holding a child who appears to be the unwelcome grandson of the old man. Of the various Actors, the Orchomenian of *Iliad*, B, 513, suits the scene best, though as his daughter was the mother of twins, the vase and the poem have different versions of the story. The choice of Nestor for the companion piece may have been suggested by the story of his hereditary enmity with the twin Actoriones of Elis, *Iliad*, A, 750 ff. (R. ENGELMANN, *Jb. Arch. Inst.* XVII, 1902, pp. 68–71; pl.; cut.)

INSCRIPTIONS

The System of Accounts at Delphi. — In *Hermes*, XXXVII, 1902, pp. 511–529, BRUNO KEIL discusses the two inscriptions published in *B.C.H.* XXIV, 1900, pp. 463–483, with reference to the system of accounts. He finds that the term *παλαιόν*, as applied to money, is equivalent to *Αἰγυαῖον* and *καινόν* to *Ἀμφικτυονικόν*. The relations of these kinds of money to each other and to the Attic coinage are established, as are also several dates and less important details.

The Inscription of Sotairos. — In *Hermes*, XXXVII, 1902, pp. 631–633, F. BECHTEL discusses the beginning of the inscription of Sotairos, with special reference to an article by Hoffmann in *Philologus*, N.F. XV, pp. 245 ff. He concludes that *Νικίας* (l. 8), *Ἱπποκράτης* (l. 9), and *Χείμας* (l. 18), are not genitives, and that the word *θηρώνιοι* at the beginning of the inscription has no connection with *θύς*.

The Inscription concerning Eugnotus. — In *Eranos*, IV, 1901–02, p. 187, O. A. DANIELSSON gives notes on the reading and interpretation of the

inscription concerning the Boeotian cavalry leader Eugnotus. (*B.C.H.* XXIV, pp. 70 ff., 176 f.)

Antonius Creticus. — A degree of the Epidaurians in honor of their fellow-citizens Euanthes (*C. I. G. Pel. I*, 932) mentions a M. Antonius ἐνὶ πάντων στρατηγός, who is identified by Fränkel with the triumvir. The inscription, however, certainly refers to the father of the triumvir, M. Antonius Creticus, and the title is the Greek version of the *imperium infinitum* conferred on him by the Senate. The seventy-four (not ninety-four) years of the inscription are reckoned from the Roman conquest, and it was in 72 B.C. that Antonius held his extraordinary command, and made his disgraceful failure. The published text of the inscription contains several other errors. (A. WILHELM, *Athen. Mith.* XXVI, 1901, pp. 419-421.)

GENERAL AND MISCELLANEOUS

Italian Researches in Crete. — In *Athene e Roma*, V, 1902, coll. 607-621 (5 figs.) and 679-694 (7 figs.), A. TARAMELLI gives a brief discussion of the discoveries made by the Italians in Crete, the most important of which were at Phaestus. He describes the buildings and various objects unearthed at the different sites, and discusses their historical bearings. He believes the so-called Camares (Kamarais) ware to be a local variety of early Mycenaean ware. He finds that the palaces at Knossos and Phaestus are the seats of peoples whose origin is in a remote period, who are important at the time of the twelfth Egyptian dynasty, are most flourishing in the Mycenaean epoch, about the fifteenth century B.C., at the time of the eighteenth dynasty, and come to a fall by violence about the ninth century B.C. He is somewhat sceptical regarding Evans's identification of the palace at Knossos with the Labyrinth, and doubts some of his theories concerning the "Mycenaean" religion.

Mycenaean Idols from Prinias. — In *Athen. Mith.* XXVI, 1901, pp. 247-256 (1 pl.; 5 cuts), S. WIDE discusses Mycenaean idols from Prinias, near Heraclion in Crete. These are of two classes. First, a goddess with upraised arms, the lower part of the body being replaced by a cylinder. Fragments show that in some cases a snake was represented in relief on the lower arm. Second, a hollow truncated cone, on the sides of which are also snakes in relief. The nature of these objects is made clear by the discovery of similar terra-cottas, by Miss Boyd, in the Mycenaean shrine at Gournia. The first figure probably represents a partly anthropomorphized goddess, while the second is a male divinity. Both are chthonic, as is indicated by the presence of the snakes. The Boeotian relief vase published by WOLTERS, *Εφ. Ἀρχ.* 1892, pl. 8, 9, probably shows a similar goddess with dancing women on either side. The cylindrical form of the lower part of the Cretan figure finds analogies in the statue of Aphrodite at Delos, said to be a work of Daedalus dedicated by Theseus, the Apollo of Amyclae, a pre-Dorian, i.e. Mycenaean, god, and the Dionysus of the coins of Aenos. In conclusion it is pointed out that the importance of the discoveries at Gournia and Prinias lies in the similarity thus shown between the village communities and lower classes of the Mycenaean age, and the later Hellenic civilization, from which the life of the princes, like that of the Homeric aristocracy, often seems so far removed.

Leucas, the Homeric Ithaca. — At the July meeting of the Berlin Archaeological Society, W. DÖRPFELD explained fully the grounds for believ-

ing that the Homeric Ithaca, Same, Dulichium, and Zacynthus were respectively the historic Leucas, Ithaca, Cephallenia, and Zacynthus. Before the use of the compass, the coast north of the mouth of the gulf of Corinth was supposed to stretch on toward the west; hence Homer's Ithaca (Leucas), beside being nearest to the mainland and farthest out of sight from Elis, was also the westernmost of the four islands. The transfer of names was caused by the Dorian migrations, when various tribes, carrying their names with them, were driven south and west, from island to island, and from the coast out, as in the case of the Cephallenians. (*Arch. Anz.* 1902, pp. 106-108.)

Personal Ornaments in the "Greek Middle Ages." — In *Jh. Oesterr. Arch.* I. V, 1902, pp. 207-213 (9 figs.). KARL HADACZEK gives examples of personal ornaments, chiefly *fibulae* of the post-Mycenaean period (eleventh to seventh century B.C.), called the "Greek Middle Ages." The examples are derived in great measure from terra-cottas discovered at the Argive Heraeum. Several *fibulae* represented have a straight bar upon which are several short cylindrical crossbars, between which are rosettes. Others have round plates. Alongside of *fibulae* common pins continued in use.

Eileithyia. — Vol. I, No. 4, of the *University of Missouri Studies*, is a translation and revision by PAUL V. C. BAUER, of his treatise on Eileithyia, published in *Philologus*, Supplementband, VIII, pp. 453-512. In it the primitive idols representing goddesses of childbirth and fruitfulness are discussed, the list of sanctuaries of Eileithyia is published with the evidences from which it is established, the votive offerings to deities of childbirth are enumerated and classified, and the representations of Eileithyia in art are described. [Columbia, Mo., 1902, published by the University; 90 pp. 8vo. \$1.00.]

Pheneus and the Pheneatiké. — In *J.H.S.* XXII, 1902, pp. 228-240, J. W. BAKER-PENOVRE describes the fluctuations of Lake Pheneus in Arcadia so far as they can be traced in the scanty allusions of writers. It is a natural mountain reservoir whose only outlet is by two underground channels, one of which issues in the river Ladon. When these channels have been choked up, the water has filled the basin to a certain well-defined limit, and the sudden emptying of the lake through the southwest channel and the river Ladon has caused the mysterious inundation of Olympia, forty miles away. At present the water has shrunk to a mere thread, and the lake bottom is covered with corn-fields. No records exist between Pausanias and the nineteenth century.

Paros. — *Athen. Mitth.* XXVI (1901), pp. 157-222 (2 pls.; 12 cuts), contains the second part of O. RUBENSON'S account of Paros, which is devoted to the ancient topography, considered under two heads: (1) The island outside of the capital. All places that show traces of habitation in antiquity are carefully noted, and the more important remains described. The most striking are a series of constructions which can be traced partly on shore, but chiefly under water in the bays of Naussa and Philisi on the northeast coast. At the latter place there are three trenches less than 1 m. broad and deep, but at least 163 m. long, cut in the rock parallel to the shore, which they reach only at a small peninsula. Between these trenches and outside the outermost are three rows of square holes. These traces suggest the foundations of walls and columns, but no satisfactory explanation as to the

purpose of such structures has been made. (2) The capital, which certainly occupied the same site as the modern Parikia. The course of the ancient walls is traced, the Acropolis described, and the few remains of ancient buildings noted. The article concludes with a discussion of the cults of Paros and the probable sites of the several sanctuaries. A full account of a necropolis of Hellenistic and Roman times is reserved for a later article.

Theraean Weights.—In *Hermes* XXXVII, 1902, p. 630, C. F. LEHMANN publishes with remarks a note from F. HILLER v. GAERTRINGEN, containing a drawing of a fragment found in the town of Thera, inscribed [ἐ]ν[ε] [α], *sc.* *μνᾱ*; i. e. $\frac{1}{3}$ ἡμιστάτηρ or τάλαντον. A second note shows that the heavy gold mina of the common norm was used at Thera.

The Clepsydra.—In *Εφ. Ἀρχ.* 1902, pp. 17–30, K. MALTEZOS discusses the clepsydra. He shows by quotations from Aristotle that “clepsydra” was the name given to utensils used for transferring liquids from one receptacle to another, in which the atmospheric pressure held the liquid as long as a hole in the top of the utensil was kept closed (by the finger). Several such utensils have been found, e. g. *R. Arch.* XXXIV, 1899, p. 7, *Athen. Mith.* 1897, p. 387. The clepsydra used in the courts was originally made so that its working depended upon the atmospheric pressure, but was afterward simplified. The rapidity of the flow of water then depended solely on the size of the hole through which it flowed out. From passages in Aeschines and Demosthenes it appears that an amphora of water (about 39 litres) flowed from the clepsydra in about 51 minutes.

A Greek Hand-mirror.—In the *Decennial Publications* of the University of Chicago, Vol. VI, pp. 3–4 (1 pl.), FRANK B. TARBELL publishes a Greek hand-mirror said to have been found in Etruria, and now in the Art Institute of Chicago. The edge of its disk is ornamented with a bead pattern. The handle is prolonged at the back into a palmette, which served to make the attachment to the disk secure. At the front it is adorned with a relief of a siren, flanked by volutes and palmettes. The bone handle, into which the bronze shank fits, is preserved. It had no ornamentation except a few incised rings. The style of the relief work points to about 450 B.C. as the probable date of manufacture.

The Death of Orpheus.—In *R. Arch.* XLI, 1902, pp. 242–279, S. REINACH discusses the death of Orpheus. He compares the story of Orpheus with those of Dionysus-Zagreus, Osiris, etc., and finds that it owes its origin to the sacrifice of a totem animal in times before the gods had human form. In the case of Orpheus, the animal was the fox. Numerous parallels are cited and discussed.

Athenian Naval Administration.—*Athen. Mith.* XXVI, 1901, pp. 377–418, contains a discussion of the Athenian naval administration, by W. KOLBE, who defends the views of U. Köhler against the recent criticism of Bruno Keil. He treats: (1) The Development of the Fleet in the fourth century, showing that *C.I.A.* II, 791, refers to the total number of Athenian ships, which was accordingly 106 in 377–76 B.C., while in 357–56 they were 283, and in 353–52 B.C., 349. (2) The Replacing of old Ships and the Building of additional Vessels. This chapter opens with a statistical examination of the inscriptions, leading to the conclusion that the average life of an Athenian trireme of the fourth century was about twenty years. There follows a study of the regulations concerning the building of new ships.

The *ῥῆς ἐξάρτοι* were a reserve squadron, annually selected from the best ships. The fleet must have required an addition of from fifteen to twenty ships yearly to replace the old boats, and about 330 B.C. the number of new ships to be added by the state seems to have been fixed at ten, while other additions were made at the cost of trierarchs, who had failed to return their ships in serviceable condition. In Arist. *Ἀθ. Πολ.* 46 (*καὶνὰς δὲ τετρήρεις*), *δέξ* is for *δέκα*. (3) The Officials. The decision of all important matters was in the power of the assembly, and the general superintendence was left to the Senate. This body elected from its own number the ten *τρηποποιοί*, who supervised the ship-building, while the oversight of the docks and arsenals was committed in the fifth century to the *νεοποί*, and in the fourth to the *ἐπιμεληταὶ τῶν νεορίων*. The change in title is explained by the destruction of the wharves and ship-houses by the Thirty, which rendered the office obsolete. With the revival of the naval power the old office was reestablished under a new name.

The Attic Archons of the Third Century.—In *Hermes*, XXXVII, 1902, pp. 435–442, JOHANNES KIRCHNER discusses the dates of Attic Archons in the third century, and criticises recent discussions by Beloch and Ferguson. He assigns Antipatros to 265–64 B.C., Arrheneides to 264–63 B.C., Diognetos to 263–62 B.C.

The "Museia" at Thespieae.—In *R. Ét. Gr.* XV, 1902, pp. 353–356, PAUL JAMOT discusses, in the light of recent investigations, the date of the reorganization of the *Museia* at Thespieae, and concludes that it must be assigned to the second half of the third century B.C.

Metrodorus the Periegete.—A scholiast on Statius, *Thebais*, III, 478 f., cites Metrodorus the Periegete for the statement that a Ptolemy (probably the first) founded three temples, one of the Sun in Ethiopia, one of Jupiter Ammon *inter Aethiopes Endios* (sic!) *et Libyas ultimos*, and near Alexandria Branchidae, *qui Jovem* (Apollinem) *Branchum colunt*. The hymn of Callimachus to Zeus and Apollo Branchus was probably connected with this temple. The date of Metrodorus is unknown. (E. MAASS, *Jh. Oesterr. Arch.* I. V, 1902, pp. 213–214.)

The Pyramid of Cenchreae.—In *Athen. Mitth.* XXVI, 1901, pp. 241–246 (1 pl.; 3 cuts), TH. WIEGAND gives the results of a recent examination of the so-called Pyramid of Cenchreae, on the road from Argos to Hysiae. It is not a tomb, but a watch-tower, guarding the entrance of the plain against incursions from Tegea. The masonry points to a date shortly before the first century B.C. The tower seems to have replaced a Greek structure of polygonal masonry, whose ruins are not far away. Incidentally, attention is called to the inaccuracy of the new map of this region prepared by the Greek General Staff.

The Water Supply of Corinth.—In *Berl. Phil. W.* November 22, 1902, is an extract from an account by J. PARTSCH of a recent trip in the Peloponnesus (JOS. PARTSCH, *Auf der Insel des Pelops*, reprint from the *Schlesische Zeitung*, Breslau, Korn, 32 pp. 8vo). In it he describes enthusiastically the results of the excavations of the American School at Athens, with especial attention to the Corinthian water supply, with its conduits and fountains.

Constantine Manasses.—In *Jh. Oesterr. Arch.* I. V, 1902, Beiblatt, coll. 65–94, LEO STERNBACH gives contributions to the history of art from the works of Constantine Manasses. He publishes several passages from

Manasses' *Chronicle*, which are probably repeated from his 'Ὀδοιπορικόν. These contain references to monuments in Constantinople. Two *Ecphrases* by Manasses are also published with critical apparatus. The first is published on the basis of Hercher's edition (*Nuove Memorie dell' Instituto*, II, pp. 491 ff.) and a new collation of the Codex Marcianus, 412 (M), fol. 75 r ff. The second is published for the first time from Codex Barberinianus II, 61 (B), fol. 107 r. Both contain interesting matter relating to monuments in Constantinople.

ITALY

ARCHITECTURE

The Origin of the Italian House.—In *Rend. Acc. Lincei*, 1902, pp. 467–507 (4 figs.), G. PATRONI discusses the origin of the Italian house, attacking Nissen's theory that it is derived from the round thatched hut, which existed in northern Europe as well as in Italy. He argues that the general principle of the Italian *domus*—blank exterior walls containing an open court surrounded by small rooms—must have originated in a warm climate, and he finds its source in the pre-Hellenic Orient. The earliest form is found at Thera,—an enclosed court with a small house of several rooms built against the wall of the court on the side opposite the entrance. The next stage is represented by the palaces of Troy, Tiryns, and Mycenae, a principal room (*μέγαρον*) surrounded by others, with a courtyard in front. In the Italian house, best exemplified by the houses at Pompeii, the *tablinum* represents the *μέγαρον*, the *atrium* is the successor of the open courtyard. The combination of *tablinum* and *atrium* is the nucleus of the primitive Italian house, and the *tablinum* is thus not an addition, but an essential and original part. This method of building was brought to Italy by the Etruscans. The writer suggests a new explanation of the passage from Varro quoted by Nonius, p. 83, which is considered in detail.

SCULPTURE

The Vestal Relief of Palermo.—In *Röm. Mith.* XVII, 1902, pp. 130–133, E. PETERSEN corrects his own published views (*Ara Pacis Augustae*, p. 75) of the constitution and interpretation of this relief, agreeing partly with the views of Samter (*Röm. Mith.* 1894, p. 125), and in some details disagreeing with him. Vesta and her priestesses present themselves before Augustus as Pontifex Maximus, who extends to the foremost of them some as yet undetermined object.

PAINTING AND MOSAIC

Etruscan Wall-painting.—In *Röm. Mith.* XVII, 1902, pp. 149–157, E. PETERSEN argues (against G. Körte, *Antike Denkmäler*, II, pl. 41: *Röm. Mith.* 1898, p. 96) that the representation of Achilles and Troilos in the *tomba dei tori* at Corneto is merely the last representation of heroic Greek myths in the older Etruscan wall-painting, which then passed on to realistic subjects from contemporary life.

Mosaic of Aristo.—In *Röm. Mith.* XVII, 1902, pp. 122–129 (cut), H. LUCAS points out that the mosaic of a bacchic scene in the Antiquarium of the Berlin Museum with the inscription ARISTO FAC(iebat) (*C.I.L.* VI, 4, 29825) is one of several found in January, 1823, in the bath,

probably belonging to some villa, on the Via Appia, about half a mile from the monument of the Servilii. In connection therewith he supplements Brunn (*Gesch. d. griech. Künstler*, II, 331 ff.) by giving a complete list of the artists in mosaic examples of whose signed work have come down to us.

INSCRIPTIONS

Fragments of the Fasti Saliorum Palatinorum.—In *Röm. Mith.* XVII, 1902, pp. 158-165, CHR. HUELSEN publishes two small but new fragments of these Fasti, one of the year 184 B.C., and another which he ascribes to the year 74 or 75 A.D. MOMMSEN, however, in an appended note, completes the fragment quite differently, and ascribes it to the year 40 A.D.

The Death of the Emperor Decius.—In *Jh. Oesterr. Arch.* I, V, 1902, Beiblatt, coll. 139-140, SEYMOUR DE RICCI republishes the inscription *C.I.L.* VI, 3743 (= *Suppl.* 31,130). Lines 2 and 3 he reads: *Dico Decio tertium et Dico Herennio co(n)s(ulibus)*. The date is June 24, 251 A.D. As Decius and Herennius appear as *Diei*, both must have died before that date, perhaps early in June, 251 A.D. The stone, which had disappeared, was rediscovered in the collection of Emile Zola. It was formerly in the Villa Borghese. It is published and discussed also by CHR. HUELSEN, *Röm. Mith.*, XVII, 1902, pp. 165-171.

Inscriptions Relating to Roman Antiquity.—In *R. Arch.* XLI, 1902, pp. 343-368, R. CAGNAT and M. BESNIER republish from various sources one hundred inscriptions (Nos. 42-141) relating to Roman antiquities which appeared in periodicals and monographs from February to June, 1902. Several of the inscriptions are in Greek. The publication is continued for July-December, *ibid.* 432-462 (Nos. 142-256), with indexes, pp. 463-476.

COINS

The Coins of the Ara Pacis.—In *Jh. Oesterr. Arch.* I, V, 1902, pp. 153-164 (1 pl.; 3 figs.), W. KUBITSCHKE discusses the coins on which the Ara Pacis of Augustus is represented. A table of the two groups of middle bronzes of Nero is given, and a second table is devoted to the middle bronzes of Domitian. The Ara Providentiae and the Ara Salutis Augusti had the same form as the Ara Pacis.

Portraits of Roman Emperors on Coins.—In *B. M. Soc. Ant. Fr.* 1902, pp. 169-174, JULES MAURICE discusses the heads on coins of the Roman Empire. He finds that some of these are portraits of the emperors whose names they bear, but that only those heads are to be regarded as authentic portraits which are found on coins struck in mints which belonged at the time when the coins were issued to the emperor whose likeness is sought. The reason is that when the empire was divided, each emperor might issue coins in the name of his colleagues, but allowed his own likeness to be used upon them. Examples of such use are given.

GENERAL AND MISCELLANEOUS

Palaeolithic and Neolithic Civilization.—In *B. Paleol. It.*, 1902, pp. 158-183 (1 pl.; 14 figs.), L. PIGORINI discusses stone implements of palaeolithic type found in neolithic centres. He reaches the following conclusions: That the palaeolithic civilization is represented by two entirely

distinct groups of objects, probably originating in two different migrations. That the neolithic civilization was brought into Europe by another distinct migration. That before the end of the neolithic period the central part of the continent was occupied by the inhabitants of the *pallafitte*. That the palaeolithic peoples were not destroyed by the newcomers, but, having at first scattered in various directions, were finally more or less completely incorporated with them. The civilization called *magdalénienne* corresponds to the neolithic and is not connected with the preceding or following civilizations; it did not reach Italy, and is to be regarded as a temporary appearance of a northern population, which later returned to its former home.

The Stone Age in Italy.—In his *Storia di Roma Antica* MOMMSEN stated that there was in Italy no trace of the stone age. In his recent annotated edition of MommSEN's work, ETTORE PAIS has allowed the statement to stand without comment. To prove that the assertion was entirely unjustified in the original work, L. FIGORINI gives in *B. Paletn. It.* 1902, pp. 147-158, a bibliography of statements on this subject published from 1541 to 1859.

The Necropolis of Remedello Sotto and the Eneolithic Period.—In *B. Paletn. It.* 1902, pp. 66-103 (31 figs.), G. A. COLINI continues his work on the necropolis of Remedello Sotto and the eneolithic period in Italy (see *Am. J. Arch.* 1902, p. 218), treating in this section the following classes of objects: the vertebrae of fish and the teeth of animals (especially boars' tusks) used as ornaments, and beads of stone, shell, or bone.

Pelasgic Walls near Amitemum.—N. PERSICHETTI, in *Röm. Mith.* XVII, 1902, pp. 134-148 (3 cuts), describes and discusses the character and purpose of certain imposing walls in a ravine near Amitemum, and concludes that they formed part of a system of dams for controlling the flow of the mountain torrent, which might injure the cultivated fields below.

Norba founded in Roman Times.—In *B. Paletn. It.* 1902, pp. 134-140, L. FIGORINI, speaking briefly of the excavations at Norba, calls attention to the fact that nothing of a prehistoric nature has been found, and that everything indicates that the town was founded in the Roman period.

Ancient Fire-shovels.—In *B. Paletn. It.* 1902, pp. 120-134 (2 pls.; 3 figs.), G. GHIRARDINI describes several ancient bronze fire-shovels. Their use is determined by the discovery of three in Etruscan tombs of the seventh century B.C., in conjunction with terra cotta braziers.

Ancient Lamps as Memorials.—In *Atene e Roma*, V, 1902, September, coll. 673-679, R. PARIBENI has a brief article on ancient lamps in their character as illustrations and memorials (*castolone illustrate*) of contemporary events and persons. Their inscriptions and plastic adornment frequently refer to current events and the like.

The Roman Road from Aquileia to Emona.—In *Jh. Oesterr. Arch.* I, V, 1902, Beiblatt, coll. 139-160, OTTO CUNTZ studies the Roman road from Aquileia to Emona as depicted in the Tabula Peutingeriana and elsewhere, and describes from observation the existing vestiges of the road, its stations, and its fortifications.

The Island in the Tiber.—The eighty-seventh volume of the *Bibliothèque des écoles françaises d'Athènes et de Rome* is an elaborate treatise on the Tiber Island in antiquity, by MAURICE BERNIER. The history of the island, the

introduction of the worship of Asclepius, the bridges over the Tiber, the cult of Asclepius in general and on the island in particular, the secondary cults of Jupiter Jurarius, Vejovis, Semo Sanctus, Faunus, and Tiberinus, and the topography of the island in antiquity are discussed in detail. In appendices the author gives a bibliography, an iconography, a list of ancient objects still in place on the island, a list of the principal excavations on the island, a list of figured monuments found on the island, and a chronological table of interesting historical events that took place there in ancient times. (MAURICE BESNIER, *L'Île Tibérine dans l'Antiquité*, Paris, 1902, Fontemoing, 359 pp.; 1 pl.; 31 figs.; 8vo.)

The Classical Topography of the Roman Campagna. — In the *Papers of the British School at Rome*, Vol I, 1902, pp. 127-285 (8 maps; 1 key map; 23 figs.), T. ASHBY, Jr., publishes the first part of an investigation of the ancient roads in the Campagna and the monuments that mark their courses. The present paper treats of the Via Collatina, the Via Praenestina, and the Via Labicana. The remains of the roads are described and their courses determined as accurately as the existing indications permit. The ancient settlements along the roads are also carefully described. The increasing cultivation of the Campagna tends to make the remains of the ancient monuments disappear, and this fact adds to the importance of Mr. Ashby's paper.

The Date of Vitruvius. — In *R. Arch.* XLI, 1902, pp. 39-81, VICTOR MORTET discusses passages in Vitruvius *de Architectura*, especially the introduction, and maintains that the author lived under Vespasian, to whom, and not to Augustus, the work is dedicated. Vitruvius himself probably came from Africa and had travelled in various regions.

Mars and Rhea Silvia. — In *B. M. Soc. Ant. Fr.* 1902, pp. 150-152 (pl.), A. HÉRON DE VILLEFOSSE publishes a fine silver patera found in Syria. The flat handle is adorned with reliefs. At the end is a female bust above four rosettes; below is a youth with helmet, shield, and lance, floating downward toward a sleeping woman, whose clothing is drawn aside by a winged cupid. The scene is interpreted as the visit of Mars to Rhea Silvia.

A Bronze Tablet with Astronomical Representations. — In *Jh. Oesterr. Arch.* I. V, 1902, pp. 190-191 (1 pl.), ERNST MAASS publishes a fragment of a round plate of bronze found near Salzburg. On one side are two rows of Latin names. Those extant are:

| | | | |
|-----------|---------|--------|----------|
| (Pi)scēs | Aries | Taurus | Ge(mini) |
| (M)artius | Aprilis | Maius | Iu(nius) |

On the other side are parts of representations of the signs of the zodiac and of other constellations. The tablet was probably intended for school use.

Sallustius-Salutius and the Signum. — In *Hermes*, XXXVII, 1902, pp. 443-455, TH. MOMMSEN distinguishes between Flavius Sallustius, *praefectus praetorio* of Gaul under Constantius and Julian, consul in 363 A.D., and Saturninus Secundus, with the added name (*signum*) Salutius, praefect of the Orient under Julian, Jovian, and Valens. He discusses the use of the *signum*. This does not occur in inscriptions before the middle of the second century after Christ. It was chiefly used by the upper classes. It regularly ends in *-ius*, has nothing to do with family names, is usually masculine in

form, even when women are mentioned, and was originally used to designate groups rather than individuals.

Permits to export Antiquities in the Sixteenth Century. — In *R. Arch.* XLI, pp. 102-116, S. REINACH publishes a number of permits to export antiquities from Rome. They are dated about the middle of the sixteenth century. The antiquities specified are insufficiently described, but the documents — the originals of which are in the Vatican — are of some value in tracing the history of museums and collections.

FRANCE

The Earliest Gallic Religion. — In the *Revue des Études Anciennes*, IV, 1902, pp. 217-234, CAMILLE JULLIAN continues his discussion of early Gallic religion. (See *Am. J. Arch.* 1902, p. 486.) He maintains the existence of a Pan-celtic Teutates and gives evidence regarding the worship of Vulcan, Belenus, Minerva, Bellona, Victory, Diana, The Mother of the Gods, Ceres, groups of divinities, and heroes. *Ibid.* pp. 271-286, the worship of sacred animals, plants, and rivers, the cult of fetiches, the existence of temples, sacred woods and lakes, the property of the gods, the use of altars and statues, and "effigies and signs," are discussed in a continuation of the treatise.

The Moreau Collection at Saint Germain. — In *R. Arch.* XLI, 1902, pp. 167-206 (34 figs.), H. HUBERT begins a description of the Moreau collection of antiquities now in the Museum of Saint Germain-en-Laye. The collection was formed by the late Frédéric Moreau and is derived from numerous excavations carried on by him from 1873 to 1893 at various places in the valley of the Oureq and elsewhere between the Marne and Aisne. The inventories and publications of the collector are discussed and the contents of thirty graves in different places described. The illustrations represent personal ornaments, weapons, and some specimens of pottery.

A Bronze Knife. — In *R. Arch.* XLI, 1902, pp. 82-84 (fig.), L'Abbé BREUIL publishes a bronze knife handle found in 1886 at Essômes (Aisne), and now in the collection of the discoverer, M. de Laubrière, at Nantes. The handle is a rudely formed draped human figure. Whether the work belongs to the Bronze Age or to Gallo-Roman times is uncertain.

A Horseman in Conflict with a Snake-footed Man. — In the *Revue des Études Anciennes*, IV, 1902, pp. 287-297 (3 figs.), GEORGES GASSIES publishes and discusses a stone group about 0.50 m. high, in the cabinet of Mr. Dassy, at Meaux. A mounted warrior is overcoming a snake-footed giant. The warrior carries a shield adorned with a star. His hand passes through the shield and grasps its rim. His costume is German or Gallic rather than Roman. Similar monuments are discussed. The monument does not represent or symbolize the conquest of barbarians by a Roman emperor, but has a religious meaning. Perhaps it is a sepulchral monument.

The Minerva of Poitiers. — In *R. Arch.* XLI, 1902, pp. 161-166 (1 pl.), ARTHUR MAHLER publishes the statue of Athena found at Poitiers. (Cf. *Am. J. Arch.* 1902, p. 369.) He finds that the head is a copy of a work of about 480 B.C., while the torso and drapery show later elements treated in an archaic manner. The whole is a work of the late archaistic school. Incidentally it is shown that the head in Berlin (Furtwängler, *Neuere Fälschungen von Antiken*, fig. 1) is not a modern forgery, as Furtwängler thinks, but an archaistic work.

CHRISTIAN ART

GENERAL AND MISCELLANEOUS

On the Changes in Color in Paintings. — E. DURAND-GRÉVILLE has made a special study of the chemical changes in the color of paintings and especially of the greens. He read a paper on this subject before the Congress of the History of Art in Amsterdam in 1898, and has recently published another article on the same subject. He has also written upon the changes of color in pen drawings. The latter changes are ascribed to the effect of oxygen in the air. The change of colors in paintings he ascribes to sulphydric acid, also contained in the air. It would seem, therefore, to be dangerous to base an attribution of a painting upon the color of the landscape, without taking into account the degeneration of such colors which may be due to chemical changes. (*Chron. d. Arts*, 1902, p. 251.)

Jesus and St. John. — In *R. Arch.* XLI, 1902, pp. 130-131 (1 fig.), CECIL TORR, replying to a question, argues that the birth of Jesus and the ἀνάδειξις of St. John date between September 6, 6 A.D., and September 6, 7 A.D., that Jesus was eighteen years old at the beginning of his teaching, and that Luke iii, 23, relates really to the age of St. John, not to that of Jesus. (See *Am. J. Arch.* 1902, p. 488.) He publishes a fragment of gilt glass with a portrait of Jesus as a youth, now in the British Museum. The date is about 250 A.D.

BYZANTINE AND MEDIAEVAL ART

GENERAL AND MISCELLANEOUS

A Byzantine Mosaic Picture. — In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 95-103 (1 pl.; 3 figs.), DOM E. ROULIN publishes a Byzantine mosaic tablet in the museum at Vich, in Spain. The picture represents St. Nicholas as a hardly legible inscription attests. The saint holds up one hand in a gesture of blessing, with the tips of the thumb and the fourth (ring) finger joined, while the other fingers are extended. The frame is decorated with an intricate filigree pattern. The picture belongs probably to the thirteenth century and is relatively well preserved. It was probably brought to Vich from Italy by Cosmo de Montserrat in the second half of the fifteenth century.

The Barberini Ivory. — In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 79-94 (1 pl.), G. SCHLUMBERGER publishes and discusses at some length the carved ivory acquired by the Louvre from the Barberini collection. It was originally composed of five pieces, one of which is lost. It was not a diptych, but part of the binding of a book. Its date is not earlier than the sixth century. On the back are the names, in Merovingian writing, of some of the kings of Austrasia in the sixth and seventh centuries. The mounted emperor in the central panel, who is being crowned by a winged victory, is Justinian. On the left-hand panel is a warrior. Perhaps a similar figure occupied the lost right-hand panel, in which case the two might be Belisarius and Narses. The upper panel is occupied by a bust of Christ and two angels. In the lower panel barbarians leading wild beasts indicate the great extent of the imperial power.

Illustrations of the Gospel of St. Matthew. — In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 175-185 (pls. xvi-xix), H. OMONT publishes four

paintings from a Greek manuscript of the Gospel of St. Matthew copied in gold uncials on purple parchment now in the Bibliothèque Nationale. The manuscript was bought in 1899 at Sinope, in Asia Minor. It belongs to the sixth or seventh century after Christ. The scenes represented are: (1) The daughter of Herodias with the head of St. John the Baptist, (2) the Second Miracle of the Loaves (Matthew xv, 32-38), (3) the Miracle of the Two Blind Men of Jericho, (4) the Miracle of the Withered Fig-tree. A fifth painting, representing the first Miracle of the Loaves (Matthew xiv, 15-21), is partially destroyed. The composition and execution of these miniatures are remarkably good, and this manuscript deserves a place beside the Vienna *Genesis* and the *Gospels* of Rossano as one of the earliest monuments of Christian painting.

The Church at Kaisariane.—In 'Εφ. 'Αρχ. 1902, pp. 51-96 (supplementary pl.; 23 figs.), JOSEPH STRYGOWSKI publishes a detailed study of the church at Kaisariane, on the slope of Mt. Hymettus. The existing church was erected probably in the tenth century. An earlier structure was built probably in the fourth or fifth century on the site of a pagan temple. An additional narthex and a vestry or chapel are later than the body of the church. The walls of the church are of alternating courses of stone and brick, a mode of construction common in Greek churches. In plan, the church shows a combination of the square domed building and the basilica. It has a central dome over the crossing of the nave and the transept and it has also two side aisles. Nave and aisles end in apses. The dome rests on a drum supported by four columns. These are ancient. The use of octagonal pillars beside the doors is a peculiarity of Athenian architecture about the tenth century and later. Lintels adorned with anthemias inspired by those of the Erechtheum, but marked as Christian work by crosses enclosed in circles, are Athenian work of the fourth century. Some slabs of Proconnesian marble with Byzantine ornament were probably connected with a rebuilding of an earlier church under Justinian. The paintings of the narthex date from the latter part of the seventeenth century and represent the Trinity surrounded by saints, scenes from the life of the Virgin, and parables. Those in the church proper are hardly earlier. They represent in the dome the Deity, saints, and angels, surrounded by prophets, in the apse the Virgin with the angels Michael and Gabriel, and about the walls scenes from the life of Christ.

The Queen of Sheba in the Byzantine Chronicles.—Georgios Monachos, who lived in the time of Michael III (842-867 A.D.), seems to have been the first of the Byzantine historians to identify the Queen of Sheba as a sibyl, and thus mingle biblical and Pagan traditions. Georgios Kedrenos and Michael Glykas seem to be the only Byzantine historians who accepted this identification. In the *Byz. Z.* 1902, pp. 120-121, SAMUEL KRAUSS believes that this identification may be traced back to Pseudo-Josephus, who recognized in the Queen of Sheba, Nikaule, Queen of Ethiopia, who propounded problems to Solomon and was known as a sibyl by the Greeks.

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ITALY

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The paintings, which represent the crucifixion (twice), scenes from the Old and the New Testaments, and various saints and martyrs, show the decoration of a Roman church in the eighth century, when Rome was a Byzantine city. The inscriptions are partly in Greek, and the Byzantine character of the church is evident, though somewhat modified by local influences. An appendix (pp. 114-119, 5 figs.) discusses the presentation in Byzantine art of the 'Descent into Hell.' An index is added.

Santa Maria in Aurona at Milan.—The Church of Santa Maria in Aurona, now destroyed, ranks as one of the earliest Lombard experiments in ribbed cross-vaulting. The remains of one of its clustered piers and a number of sculptured capitals of columns are published by LUCA BELTRAMI in *Rassegna d'Arte*, 1902, pp. 56-59. This church was founded by Aurona, the sister of Theodorus, archbishop of Milan, in the year 740 A.D. Cattaneo in his *L'architettura in Italia dal secolo VI al mille circa* assigns the church to the twelfth century. In the present article Beltrami shows that Cattaneo's arguments are inconclusive.

The Church of San Angelo at Perugia.—The early Christian circular church of San Angelo at Perugia, dating from the fifth century, is published by O. SCALVANTI in *Rassegna d'Arte*, 1902, pp. 53-56.

The Nativity represented by Niccolò and Giovanni Pisano.—In the Museum of the Vatican there is an ivory of the eleventh century, which in composition bears a striking resemblance to the relief of the Nativity in the pulpit of the baptistery at Pisa by Niccolò Pisano, and, also, to the relief of the same subject in the pulpit by Giovanni Pisano at Pistoia. In *Arte e Storia*, 1902, pp. 85-86, ALFREDO MELANI infers that the Pisani were thus furnished with the traditional repetition of this subject from which they made but slight variations.

The Reliquary of St. Nazarius at Milan.—In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 65-78 (3 pls.; 5 figs.), F. DE MÉLY publishes the silver reliquary of St. Nazarius, which he was permitted to examine at the church of St. Nazarius at Milan in 1899. The relief on the lid represents Christ seated and eleven disciples standing. On the front is the Judgment of Daniel condemning the two old men; on the right side the Adoration of the Magi; on the back the Judgment of Solomon; on the left side the Annunciation to the Shepherds. The relics contained in the casket were brought to Milan in 382 A.D. Comparison of the work with the few dated works of about that time shows that it stands between the disk of Valentinian (370) and the diptych of Honorius (406), but nearer the former; 382 A.D. may be accepted as its approximate date. The illustrations of the manuscript of the *Liad* in the Ambrosia Library are shown to be about contemporaneous with the diptych of Honorius, but very slightly later.

The Reliquary of Jacopo at Pistoia.—In the Cathedral of Pistoia there is a fine reliquary known as that of the San Jacopo Apostolo. Ser Nicolao di Ser Guglielmo, a goldsmith of Pistoia, is credited as its author. In *Arte e Storia*, 1902, pp. 69-70, ALFREDO MELANI shows that this reliquary cannot have been the workmanship of a single artist, but is a work by several hands at different periods.

Frescoes at Campione.—The works of the Maestri Campionesi, celebrated especially as architects and sculptors from the thirteenth to the fifteenth century, have been well known. Few, however, have visited the little

town of Campione. In the Church of the Madonna dei Ghirli has been recently recovered a series of frescoes representing the life of the Virgin and of John the Baptist. In *L'Arte*, 1902, pp. 161-167, E. GERSPACH attributes these frescoes to Lippo Memmi. The north portico of the church is adorned with frescoes, the authorship of which is made known by Gerspach, who publishes for the first time an inscription showing that they were painted in the year 1400 by Maestro Lanfranco and Filippo de Veris.

Cosmati Mosaics.—The Cosmati mosaics, which played such an important part in the decoration of doorways, pulpits, altar-fronts, tombs, and pavements in the twelfth and thirteenth centuries in Rome and Southern Italy, form the subject of a copiously illustrated article by CARYL COLEMAN in the *Architectural Record* for January, 1902, pp. 202-220. The artistic character and the historic Byzantine origin of this type of decorated ornament are made evident.

The "Liber Canonum" of the Biblioteca Vallicelliana.—In the Biblioteca Vallicelliana of Rome, Codex A-5 is an important Liber Canonum of the ninth century. In *L'Arte*, 1902, pp. 229-239, PIETRO TOESCA publishes an account of this manuscript, which he believes was written in Italy, and adorned with miniatures by a painter of the School of Rheims.

A Treatise on Glass Painting by Antonio of Pisa.—Antonio of Pisa, who in 1395 made the beautiful window over the two doors on the south of the Cathedral of Florence, and who also worked at Assisi, wrote a treatise on glass painting which is published and translated by ROBERT BRÜCK in *Rep. f. K.* 1902, pp. 240-269. This treatise is not based upon that of Theophilus, presbyter, but seems to be the expression of his own experiences. He gives direction for the making and application of glass of various colors, for soldering and breaking glass, for polishing it, and for other details connected with the art.

Petrarch's Laura.—The *Annales de la Faculté des Lettres de Bordeaux, Bulletin Italien*, 1901, pp. 85-91, published an article by EUGÈNE MÜNTZ on the iconography of Petrarch's Laura. This was an extract from the volume on Petrarch subsequently published in collaboration with Prince d'Essling. In this article Müntz assumes that Laura was the daughter of Audibert de Noves and the wife of Hugues de Sade. This assumption is called in question by HENRI HAUETTE, *Ibid.* 1902, pp. 15-22. The evidence upon which it is based is inconclusive, and extracts from Petrarch's poems seem to show that Laura was unmarried. Her identity, therefore, must be for the present left unknown.

Simone Memmi.—In studying the paintings of the fourteenth century at Avignon, E. MÜNTZ finds that Avignon possesses but one painting by Simone Memmi: the fresco of the front of Notre-Dame-des-Doms. Sienese documents and an inscription prove that the painter's name was really "Memmi." A painting at Liverpool with the inscription "Simon de Senis me fecit" and the date 1342 leads, by comparison, to the assurance that the series of scenes of the passion now divided among the museums of the Louvre, Antwerp, and Berlin, is by Simone Memmi. (*C. R. Acad. Insc.* 1902, p. 237.)

FRANCE

Mont St. Michel.—In the *Architectural Record*, January, 1902, pp. 10-36, MONTGOMERY SCHUYLER begins a series of articles entitled 'Architectural Days.' The first article treats of Mont St. Michel, is interestingly written and well illustrated with plans and photographic reproductions.

The Cathedral of Chartres and its Origin.—In *R. Arch.* XLI, 1902, pp. 232-241, RENÉ MERLET gives an account of the so-called Puits des Saints-Forts, Prison of St. Savinian and St. Potentian, and Druidic Grotto in the crypt of the Cathedral of Chartres. In the Grotto was an image of the Virgin, of the twelfth century, which was destroyed during the Revolution. The Grotto itself and the Puits des Saints-Forts were destroyed in the seventeenth century, when the Prison was hidden behind a wall. The traditions of the *Virgo paritura* and of SS. Savinian and Potentian are discussed. The writer has found the Puits des Saints-Forts, and hopes by further excavations to find the Grotto and the Prison.

ENGLAND

Pre-Norman Crosses.—In *Reliq.* VIII, 1902, pp. 243-256 (12 figs.), J. ROMILLY ALLEN discusses a font at Dolton, in Devonshire, which is made from the remains of a pre-Norman cross-shaft. This was a product of the Saxon school of Wessex, and presents analogies with early ivory carvings in Gaul, and ecclesiastical sculpture in Yorkshire and Germany. Its date is probably toward the end of the pre-Norman period. *Ibid.* pp. 272-274 (3 figs.), W. G. COLLINGWOOD discusses fragments of pre-Norman carving built into the parish church at Lancaster.

Croscombe Church.—About three miles from Wells, in the little village of Croscombe, is an interesting old church of the perpendicular Gothic style. The church is described and well illustrated in the *Architectural Record*, June, 1902, pp. 195-201.

The Churches of Hayling Island.—In *Reliq.* VIII, 1902, pp. 257-271 (26 figs.), J. RUSSELL LARKBY describes the churches of North and South Hayling, on Hayling Island. At South Hayling the church is Early English and Early Decorated in style, and contains a Saxon and a Norman font. At North Hayling the church is Norman and Early English, with later additions.

RENAISSANCE ART

ITALY

A Renaissance Leaning Façade at Genoa.—In the *Memoirs of Art and Archaeology*, published by the museum of the Brooklyn Institute of Arts and Sciences, Vol. I, No. 1 (22 pp.; 13 figs.), W. H. GOODYEAR describes the façade of the church of S. Ambrogio, at Genoa, which shows a noticeable departure from the vertical. This is evidently constructive, not accidental. The part of the façade which shows this peculiarity was built near the end of the sixteenth century. This is the only known example of a leaning façade in Renaissance architecture. The examples to be found in mediaeval architecture are mentioned with some description and discussion.

Monumental Doorway and Reliefs from an Arch at Cremona.—In the Museo Civico at Cremona is a fine doorway known as the *Porta del mar-*

chese Filippo Ala Ponzone. In *Arte e Storia*, 1902, pp. 62-63, Cav. LUIGI LUCCHINI describes the doorway and assigns it to the architect and sculptor Benedetto Brioschi, who made for Cremona the reliquary of SS. Marcellino and Pietro. *Ibid.* p. 63, LUCCHINI describes some finely sculptured reliefs from a triumphal arch, now in the same museum, and ascribes them to Cristoforo Solaro.

The Architects of the Palazzo della Cancelleria in Rome.—The question as to who was the architect of the Palazzo della Cancelleria is again discussed by E. BERNICH in *Rassegna d'Arte*, 1902, pp. 69-71. In *Napoli Nobilissima*, Vol. VII, fasc. 12, he published a document showing that the miniature painter Gaspare Romano was employed as an architect and painter on that building. He now holds that the general design was very likely furnished by Alberti, and that probably Bernardo Rossellino was employed in its execution. He also suggests that Alberti may have designed the Ducal Palace at Urbino, and that his design was executed by Luciano da Laurana.

The Loggia del Consiglio at Verona.—Fra Giocondo has long been considered and by many writers to have been the architect of the beautiful loggia del Consiglio in Verona. This attribution has been disputed by Gaetano Da Re, the librarian of the Biblioteca Comunale at Verona. He suggests that it might have been the work of Antonio Rizzo, without, however, definitely assigning the building to him. His arguments are discussed, and the traditional attribution upheld by L. MARINELLI in *Rassegna d'Arte*, 1902, pp. 59-62.

Lombard Artists at Rome.—In the *Rep. f. K.* pp. 49-64, FRANCESCO MALAGUZZI VALERI publishes some new documents concerning Cristoforo Solari, Bramante, and Caradosso. The documents are of importance in relation to the activity of these Lombard artists at Rome.

The Tabernacolo del Verrocchio in Or San Michele.—In *L'Arte*, 1902, pp. 185-189, and 254, I. B. SUPINO, B. MARRAI, and GERSPACH write concerning the Tabernacolo del Verrocchio, at Or San Michele. Fabriczy in *L'Arte*, 1902, p. 46, held that this tabernacle was made by Donatello for the statue of St. Louis. This view is now disputed by the three writers mentioned, who show that the tabernacle could not have been made until long after the date of that statue, also that the statue would not look well in the tabernacle, unless placed upon a small pedestal, and, if so placed, would be too high to stand in the tabernacle; and, again, that the tabernacle is considerably wider than the tabernacles designed for single figures, and, consequently, must have been made for the group by Verrocchio, which it now contains.

Bas-reliefs of Castel di Sangro.—In *L'Arte*, for November-December, 1901, ANTONIO DE NIXO published some interesting bas-reliefs from Castel di Sangro, Abruzzi. These reliefs he thought resembled the works of Benedetto da Majano. In *L'Arte*, 1902, pp. 112-114, MARCEL REYMOND shows that these reliefs are somewhat free copies of Ghiberti's celebrated 'Gates of Paradise' in the Baptistery in Florence.

A New Bernini Document.—In *L'Arte*, 1902, pp. 109-111, S. FRASCHETTI publishes a painting by Guidobaldo Abbatini, which represents the bust of Francesco I d'Este by Bernini. This bust was finished September 16, 1651, and sent shortly afterward to Modena. The bust excited considerable attention, and the painting is believed to have been ordered by

Bernini for the purpose of preserving a record of this masterpiece. The painting was preserved in his house as late as 1706.

An Altar-piece in the Museum at Palermo.—In the Museum at Palermo is a fine marble altar-piece from the church of San Giorgio dei Genovesi. It has been ascribed by Galeotti to Antonio Gagini. This ascription is now verified by a document preserved in the Archivio di Stato at Palermo. The altar-piece is published together with the document in *L'Arte*, 1902, pp. 180-185.

The Life and Works of Niccolò d'Arezzo.—In the *Rep. f. K.* 1900, p. 85, C. VON FABRICZY began an article on the life and works of Niccolò d'Arezzo. This is continued *ibid.* 1902, pp. 157-169. The study of documents has enabled him to present here a chronological list of the works of Niccolò, extending from 1388 to the date of his death, December 11, 1456. A similar list is given of the works of his son, Pietro.

Andrea del Castagno's Famous Men.—In the *Rep. f. K.* 1902, pp. 170-177, EMIL SCHAEFFER gives an account of Andrea del Castagno's frescoes of Dante, Petrarch, Boccaccio, Farinata degli Uberti, Filippo Scolari, and Niccolò Acciaiuoli. These frescoes were made for the room in the villa at Legnaja, owned by the Strozzi family.

The Painting by Leonardo at Affori.—The painting representing the Madonna of the Grotto at Affori, which has attracted recently so much attention, is discussed again by DIEGO SANT'AMBROGIO in *Arte e Storia*, 1902, pp. 57-59. In this article the author is especially concerned with the date of the painting, which, on various grounds, he assigns to the period from 1496-1500.

Decoration by Leonardo in the Castle of Milan.—Antonio Volpi has furnished funds for the restoration of the vault and upper portions of the walls in the Sala delle Asse in the Castle of Milan. The restoration has been most successful. On the walls were represented oak trees, whose branches spread so as to cover the entire surface of the vault. Thus was produced an unusual impression of height, and a sensation similar to that which would be produced by a lofty pergola. Amid the branches were some coats-of-arms of Ludovico il Moro. According to the plan of the Museum, this room will be utilized for works of fifteenth-century sculpture. In *L'Arte*, 1902, p. 122, G. CAROTTI proposes that it be used for objects of the time of Leonardo. These frescoes are published with illustrations by LUCA BELTRAMI, in *Rassegna d'Arte*, 1902, pp. 64-68 and 90-92. He shows that interlaced designs had become well known to the Italians through Byzantine reliefs and Mediaeval miniatures, and had assumed complicated forms by the time of Leonardo da Vinci. No more elaborate examples can be found than those of these extraordinary frescoes at Milan.

Two Works of Art in the Municipal Museum at Milan.—In *L'Arte*, 1902, pp. 65-70, GUSTAVO FRIZZONI publishes two works of art in the Municipal Museum of Milan. One of these is a painting of St. Jerome by Ambrogio Borgognone. A second is a terra-cotta relief representing a saint and a worshipper in the presence of the Madonna and Child. On the ground of its resemblance to the lunette at Certosa di Pavia, this relief is attributed to Amadeo.

Frescoes by Bramante.—Some doubt has been expressed as to the provenance of the frescoes of armed men recently acquired by the Royal

Gallery of Milan. These interesting frescoes are published by LUCA BELTRAMI, in *Rassegna d'Arte*, 1902, pp. 97-103, together with diagrams of the room in the Casa dei Panigarola from which the frescoes were taken. Beltrami furnishes decisive proof that the frescoes originally adorned this room.

Giovanni Francesco da Rimini.—Giovanni Francesco da Rimini, a little-known painter of the fifteenth century, is the subject of an article by CORRADO RICCI in *Rassegna d'Arte*, 1902, pp. 134-135. Here are published a Madonna painted in 1458, now in the Church of San Domenico di Bologna, and a Madonna painted in 1461, now in the possession of Achille Cantoni in Milan. From various details in his style of painting, Ricci infers that Giovanni Francesco was trained under Benedetto Bonfigli and Fiorenzo di Lorenzo.

Two Pictures ascribed to Vincenzo Foppa.—Two pictures bearing the name of Vincenzo Foppa, the one in the Berlin Gallery, the other in a private collection in Paris, have long been confused with one another. Both represent the Pietà, and both came originally, it is said, from the Church of San Pietro on Gessate at Milan. In the *Rep. f. K.* pp. 65-81, C. JOCELYN FROULKES argues that the Berlin picture is a strikingly characteristic work, and one of Foppa's masterpieces, and that the painting in Paris cannot be attributed to the same master.

The Portrait of Bianca Maria Sforza, by Ambrogio de Predis.—In the *Rassegna d'Arte*, 1902, pp. 93-94, FRANCESCO MALAGUZZI publishes a portrait of Bianca Maria Sforza, in the Visconti Collection at Paris. This portrait was painted for the Duke of Saxony in 1492. A finer portrait of Bianca Sforza, also by Ambrogio de Predis, was published by W. BODE in the *Jh. Preuss. Kunsts.* X, 1889, p. 75.

Frescoes by Luini at Lugano.—In the Church of Santa Maria degli Angioli at Lugano, there are notable frescoes painted by Bernardino Luini in 1529 and 1530. These comprise a large 'Crucifixion,' a series of the Passion, a 'Last Supper,' and a 'Madonna and Child.' There are also frescoes by Gaudenzio Ferrari and Bramantino. The frescoes by Luini, although painted at a late period of his life, show dependence upon Leonardo da Vinci and earlier masters. The beauty of these frescoes, as well as their lack of originality, is well appreciated by EMIL JACOBSEN in a brief article published in *L'Arte*, 1902, pp. 156-160.

The Birth of Titian.—The date of Titian's birth is discussed by HERBERT COOK in the *Rep. f. K.* 1902, pp. 98-100, and assigned to the year 1489. See *Am. J. Arch.* 1902, p. 498.

Paintings by Pietro Novelli.—The paintings by Pietro Novelli, 1603-1647, are little known outside of Sicily. A number of them were recently exhibited in an exposition held at Palermo. His style seems to have been inspired by Van Dyck and Caravaggio, as may be seen in the reproductions published by E. MAUCERI in *L'Arte*, 1902, pp. 194-196.

Shield attributed to Benvenuto Cellini.—In the Royal Armory at Turin there is a beautiful shield of the sixteenth century generally considered to be the workmanship of Benvenuto Cellini. A copy of it is found in the Royal Collection at Vienna. In *Rassegna d'Arte*, 1902, pp. 81-85, JACOPO GELLI follows M. Plon in the belief that the shield was not made by Benvenuto Cellini. Gelli attributes it to Filippo Negrioli.

FRANCE

Bust of D'Antoine Arnaud de la Briffe.—In the *Gaz. B.-A.*, Vol. XXVIII, pp. 388-394, DE M. publishes a bust of Antoine Arnaud de la Briffe, former president of the Parliament of Brittany. The bust, which is apparently a speaking likeness of President de la Briffe, was executed by J.-B. Lemoyne in 1754 and is now in the private collection of M. Émile Peyre.

The Fountain of the Rue de Grenelle in Paris.—The fountain of the Rue de Grenelle, popularly considered the masterpiece of the sculptor, Edme Bouchardon, executed between 1739-1745, is the subject of an article by ALPHONSE ROSEROT (*Gaz. B.-A.* XXVIII, 1902, pp. 353-372), who publishes the contract for the monument, its commemorative inscriptions, and appreciations of it by contemporary and other critics.

A French Renaissance Painting.—In the exhibition of Flemish painting recently held at Bruges, there was exhibited by the Corporation of Glasgow a painting representing a donor protected by a saint. This painting, as shown by SALOMON REINACH in the *Chron. d. Arts*, 1902, pp. 231-232, has been attributed to various Flemish painters, but has recently been reclaimed by Friedlaender and others as a French work. The donor represented in this picture is now thought to be one of the Dukes of Cleves and probably Jean II.

Benvenuto Cellini at the French Court.—In *R. Arch.* XLI, 1902, pp. 85-95, L. DIMIER publishes a letter from Giulio Alvarotto to his master, the Duke of Ferrara, dated January 29, 1545, in which the presentation of Benvenuto's Jupiter to Francis I of France is described. The letter is in the archives of Modena. It serves to correct some statements in Benvenuto's *Memoirs* and to fix the date of the presentation of the Jupiter between December 10, 1544, and January 29, 1545.

Guido Mazzoni and the Death of the Virgin at Fécamp.—In *Mon. Mém. Acad. Insc.* VII, 1900, pp. 187-204 (pl. xx; 4 figs.), PAUL VITRY publishes a group in the Abbey church at Fécamp representing the death of the Virgin. He compares it with the works of Guido Mazzoni, who went to France with Charles VIII in 1496, and finds in it the traits of realism peculiar to Mazzoni. In some details, however, French qualities are evident. The work may therefore be due to the school of Mazzoni or may have been executed by Mazzoni himself with the assistance of French workmen. Its date is not earlier than 1507 nor later than 1510.

Italian Paintings in the Louvre.—In the *Rep. f. K.* 1902, pp. 178-197, 270-295, EMIL JACOBSEN contributes critical notices of the Italian paintings in the Louvre. This work is similar to that which he published concerning the Italian paintings in the National Gallery, London, in the *Rep. f. K.* 1901, and is a valuable contribution, especially to one who is interested in the attributions of Italian paintings.

Two Paintings by Ercole de' Roberti in the Louvre.—Among the paintings of the Rothschild collection, recently left to the Louvre, are a figure of St. Michael and one of Sant' Apollonia, described in the new catalogue under the general title of School of Ferrara. In *L'Arte*, 1902, p. 178, VENTURI ascribes these paintings to Ercole de' Roberti.

The Portrait of Henri III in the Château de Chantilly.—There is a portrait which has been frequently reproduced and which is known as that of Prince François-Hercule, Duke of Alençon, brother of Henri III. In the *Gaz. B.-A.* Vol. XXVIII, 1902, pp. 405-411, L. DIMIER shows that this portrait represents Henri III and was by the painter, Jean Decourt, who succeeded François Clouet as court painter in 1572 and whose works are known as late as 1585.

The Town of Richelieu.—The town of Richelieu was founded in 1631 by Cardinal Richelieu. It was laid out on a simple rectangular plan, the houses being all alike, except that the buildings on the street corners were higher than the rest. The church and market are the most conspicuous buildings. As a city, however, Richelieu was a failure, as it was not situated on the lines of travel, and hence already is known as the Pompeii of France. A brief description of it is given by W. J. PARTRIDGE in the *American Architect*, August 16, 1902, pp. 53-55.

BELGIUM

The Ghent Altar-piece.—In *Athen*, November 1, 1903, ALFRED MARKS discusses the Ghent altar-piece and argues that the landscapes of the central panel and of four wings of this altar-piece, and also the landscapes of four other pictures, are by Jan van Eyck, since they contain southern plants, which Jan necessarily saw in Portugal after Hubert's death. W. H. JAMES WEALE replies, *ibid.* December 6, and MARKS replies in turn, *ibid.* December 13. Here he lays stress upon the idealism of Hubert and the success in landscape painting of Jan van Eyck.

GERMANY

The Name of the Master D*V.—In the *Jb. d. Kunsth. Samml. d. Allerhöchst. Kaiserhauses*, 1901, pp. 1-34, GUSTAV GLÜCK begins a series of contributions entitled, 'Beiträge zur Geschichte der Antwerpner Malerei im XVI Jahrhundert.' The first of these treats of 'The Master D*V,' who is known by a number of copper plates, etchings, and woodcuts. Hitherto the star has been supposed to contain an indication of his name, and he has been known as Dirck van Staren. Many reasons, however, combined to indicate that the true name of this master was Dirick Vellert, a glass painter of Antwerp and contemporary with Josse van Cleve. Although not a master of first rank, he was known to Albrecht Dürer. Glück here publishes a medallion in glass signed by Dirick Vellert, April 21, 1517, also a series of drawings which are dated and bear his monogram. These drawings were evidently intended for studies for a series of medallions in glass. In the same monograph is published a triptych by the same master, now in the possession of Herr Lippmann in Berlin. A second triptych by this master is in the Prado at Madrid.

The Kaufmann Gallery in Berlin.—In *L'Arte*, 1902, pp. 197-210, G. FRIZZONI gives a series of articles entitled, 'Ricordi di un Viaggio Artistico Oltralpe.' The first of these concerns the Kaufmann Gallery in Berlin. This gallery is rich in paintings of the fifteenth and sixteenth centuries, and contains examples of Flemish, Dutch, and German, as well as Italian, paintings. Amongst those noted by Frizzoni in this first article may be mentioned a striking portrait of a man by Van der Weyden, an

interesting 'Deposition' by Memling, and an important composition of 'St. Anne, the Madonna and Saints,' attributed to Jean Perreal (?).

A Doubtful Dürer at Frankfort.—There is in the possession of Georg Freiherr von Holzhausen at Frankfort an old German portrait ascribed by Henry Thode to Albrecht Dürer. In the *Rep. f. K.* 1901, p. 376, F. HAACK rejected this attribution and assigned the painting to Hans Baldung Grien as the true author. The authorship of this painting is again called in question by H. WEIZSACKER in *Rep. f. K.* 1902, pp. 82-88, who holds that it could not have been painted by Baldung, but that its authorship must, for the present, be considered unknown.

SWITZERLAND

The Painters of Geneva of the Eighteenth Century.—The painters of Geneva of the eighteenth century are not well known. The article, therefore, of DANIEL BAUD-BOVY in the *Gaz. B.-A.* 1902, pp. 101-113, 335-345, will be especially welcome. This article treats of Jean-Etienne Liotard (1702-89), a figure painter who emulated La Tour; Jean Huber (1721-86), surnamed Huber-Voltaire because of his keen observation and satirical character; De La Rive (1753-1817), an interesting painter of Alpine landscapes; Firmin Massot (1766-1849), a figure painter; J.-L. Agasse (1767-1849), an animal painter; and A. W. Töpffer (1766-1847), who painted landscapes and groups of peasants.

The attention of the public has recently been called to these painters by the expositions at Geneva, and the wish is expressed that some of their paintings might be permanently gathered in the Municipal Museum.

BOHEMIA

Miniature Painters of Bohemia.—In the *Jb. d. Kunst. Samml. d. Allerhöchst. Kaiserhauses*, 1901, pp. 35-126, is a monograph entitled, 'Die Illuminatoren des Johann von Neumarkt,' by MAX DVORÁK. Johann von Neumarkt, chancellor of the Emperor Charles IV, employed many illuminators in Brünn, Olmütz, Kremser, and elsewhere. The work of these illuminators shows marked Italian influence which seems to have been received chiefly from Avignon. Simone Martini's influence at Avignon was very strong, consequently these miniatures were painted in the Sieneſe ſpirit. The immediate ſucceſſors of theſe miniature painters continued to paint in very much the ſame ſtyle.

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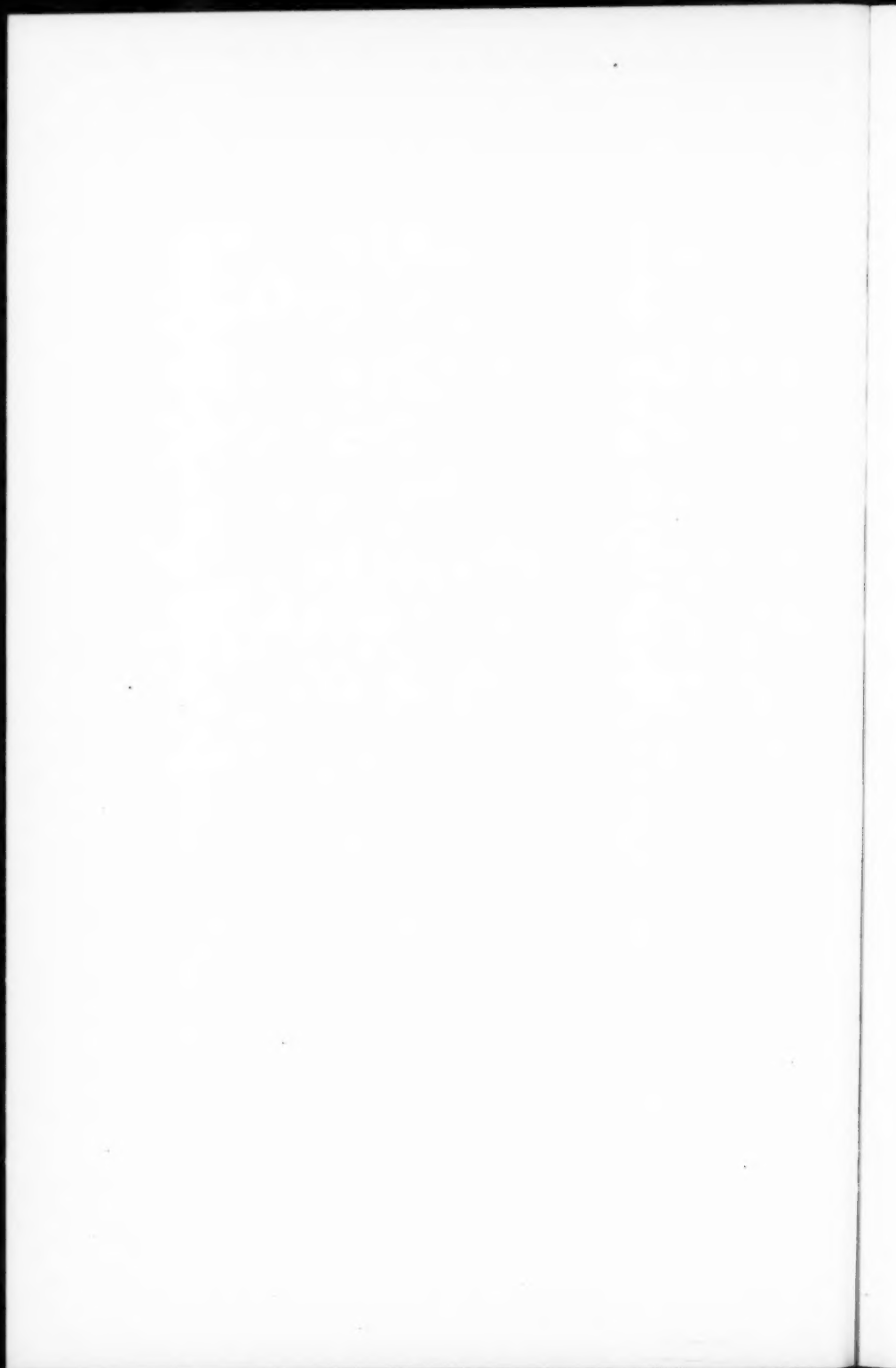
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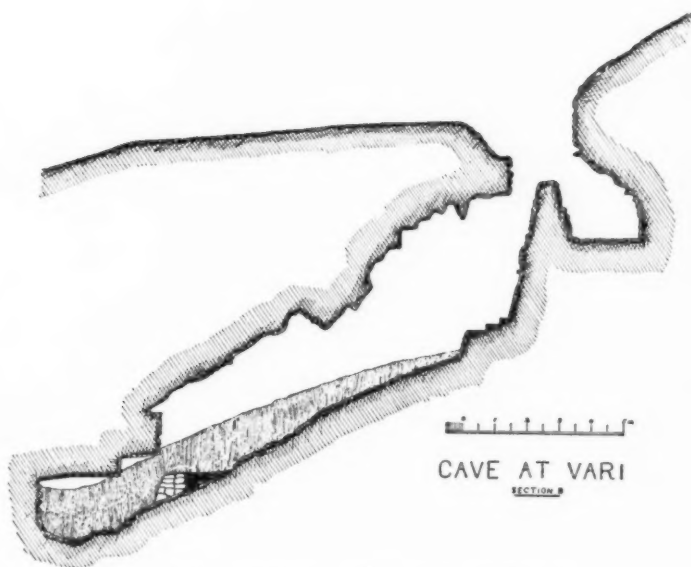
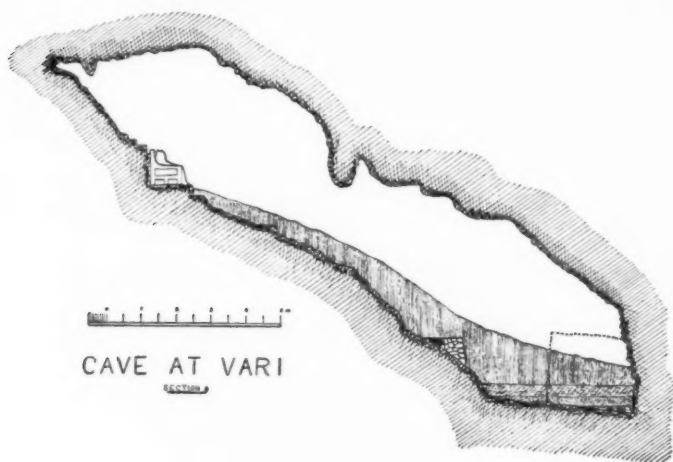


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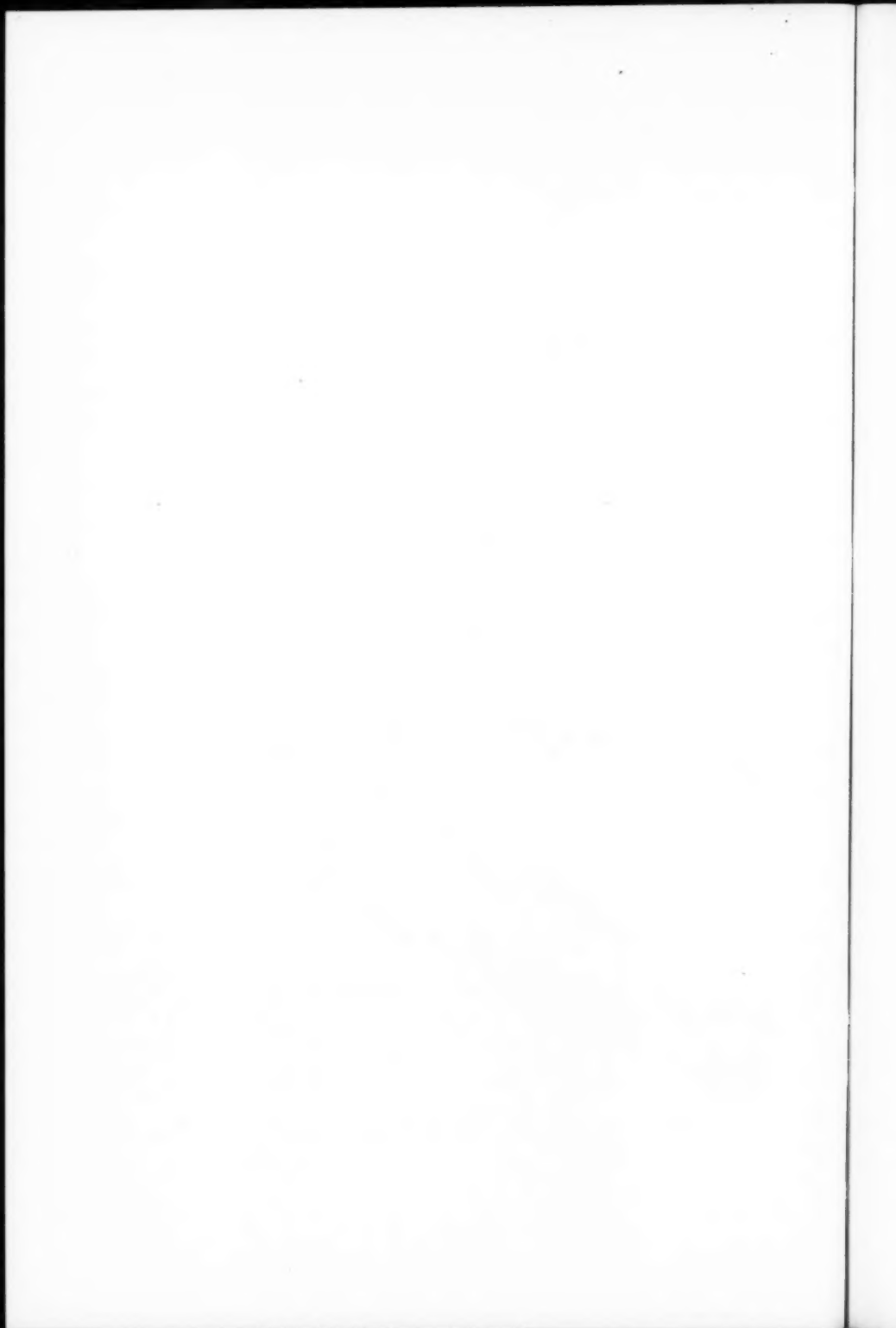


AT VARI: GENERAL PLAN





THE CAVE AT VARI: SECTIONAL DRAWINGS



THE CAVE AT VARI¹

I

DESCRIPTION, ACCOUNT OF EXCAVATION, AND HISTORY

[PLATES I, II]

THE cave of which the excavation is described in the following pages is situated about an hour's walk to the northeast of Vari, a village of some thirty houses close to the ancient deme of Anagyrus, in Atticâ. The cave is almost three hundred metres above the sea, and near the top of one of the southern spurs of Mount Hymettus.

The various names that have been given to the elevation in which the cave lies are all of modern origin, and furnish no clue to any ancient appellation. Dodwell states that at the

¹ A full account of the excavation of the Cave at Vari is given in the first of the following six articles, and need not be recapitulated here. These facts, however, should be stated: Mr. Weller supervised the actual work of excavation, and in this task was aided by Professor Dunham, Miss King, and Miss Thallon, the two ladies having been present not quite all the time. These three persons, together with Miss Baldwin and Mr. Bassett, have collaborated with Mr. Weller in the publication of the antiquities which were uncovered by the excavation. Mr. Weller, as general editor, has offered suggestions, and with the consent of the writers has made changes here and there mainly with a view to securing uniformity in the articles. In general, of course, each contributor is responsible for the matter printed above his name.

Thanks are due to Professor E. D. Perry for his interest and financial aid, and to Professor Richardson for his counsel and encouragement, as well as to a number of friends who have assisted in preparing the material for publication. — ED.

time of his visit (1805) the hill was known as Rappsāna — for what reason he does not suggest. Some of the present villagers at Vari declared that until recently the name had been Kapsāla¹ (καψάλα for κανσόξυλα, *firewood*), because of the fuel there collected, but that now the name Σπήλαιον is given to the hill as well as to the cave. As a matter of fact, the peak, while somewhat more isolated than a few of the others, may be said to be so thoroughly a part of a group of foothills as hardly to deserve a distinct name.

The rock of which these hills are almost wholly composed is a gray limestone, nearly, sometimes quite, crystalline in character. There are numerous other caves in the vicinity, one or two being larger than the one here described, but none of the others seem fitted by nature or art for human occupation.

Our cave was rediscovered in modern times by Chandler, who made a tour through Attica in 1765, and who has given us an extended account of his observations. Since his visit, the same general appearance seems to have been preserved up to the time of our excavation. The other important accounts given by visitors to the cave are enumerated below.²

Without the aid of a guide, the stranger finds it difficult to discover the mouth of the cave. There is nothing to mark the spot, and one might easily pass even now (though at present the heap of earth below the entrance attracts the attention) within a score of metres and not know of its existence.

The opening (Fig. 1, and the dotted line near the bottom of

¹ Can Dodwell have misunderstood the name that the "Calogeros" gave him?

² Chandler, *Travels in Greece*, II, chap. 32; visited the cave in 1765. Dodwell, *Tour through Greece*, I, pp. 550 ff.; visited the cave in 1805. Wordsworth, *Athens and Attica*, chap. 25; visited the cave in 1832. Leake, *The Demi of Attica* (2d ed.), pp. 56 ff. Aldenhoven, *Itinéraire Descriptif de l'Attique et du Peloponnèse*, p. 55. Ross, *Griechische Königs-Reisen*, II, pp. 74 ff. Broughton, *Travels in Albania*, I, pp. 354 ff. Vischer, *Erinnerungen aus Griechenland*, pp. 59 ff. Welcker, *Tagebuch einer Griechischen Reise*, I, pp. 146 f. Felton, *Familiar Letters from Europe*, pp. 306 ff. Stenersen, *En Reise i Grækenland*, pp. 184 ff. Curtius and Kaupert, *Atlas von Athen*, Bl. viii, 1 and 2. Milchhöfer, in Curtius and Kaupert, *Karten von Attika*, Text, Heft III-VI, pp. 16 f. Roscher, *Lexikon der Griechischen und Römischen Mythologie*, III, p. 531. The various Guide Books to Greece.

PLATE I) descends vertically in the gently sloping surface of the mountain. Its greatest length is less than four metres; its greatest breadth is but two metres. Thrusting its topmost branches above the opening rises a small fig tree, which must be the same or a lineal descendant of the one mentioned by Chandler nearly a century and a half ago. Its roots are four or five metres below the surface of the mountain in shallow earth on the first landing place.

Clinging partly to the branches of the fig tree, partly to the rock, one descends over the dozen or so



FIGURE 1.—THE CAVE AT VARI: ENTRANCE.

of broken steps, rudely cut in the ridge at the western end of the opening, down to the landing just mentioned (ρ in PLATE I). From here, as the eyes become accustomed to the dim light, it is possible to see down into either of the two rooms of the cave, which are separated by a massive rock partition. Here one may decipher two inscriptions which he saw from above. From the first (p. 299 and π in PLATE I) we learn that one "Archedemus, the Therean, a nympholept, at the Nymphs' counsel wrought out the cave." The second (p. 299 and ϕ in PLATE I) in larger letters repeats in the Doric dialect the legend, "Archedamus the Therean." What Archedemus really did will become evident as we go on.

From this point the floor of the cave slopes away rapidly in both rooms to the inner end. The contour lines in PLATE I, the sections in PLATE II, and the accompanying photographs show accurately the degree of declination. Leaving the position on the landing, one descends, at first abruptly, by the ancient stairs to a position at the upper side of the larger

room. Here the light from the entrance is still sufficient to allow of the examination of various objects of interest. Immediately to the left (*a* in PLATE I) is the largest shrine of the cave. It is dedicated to Pan, as we learn from the inscription beneath it (p. 295), and is in form a rough imitation of the façade of a temple.¹

Its general shape may be seen near the centre of the interior view shown in Figure 2, where the inscription may also be read.



FIGURE 2. — INTERIOR VIEW AFTER THE EXCAVATION.

As nearly as we could determine, the relief representing a youthful Pan (p. 310 and PLATE IX) fitted in the niche at the back of the shrine, while other reliefs were no doubt set up on either side of this. It is worth noting that the bottom of the marble relief of PLATE III fitted reasonably well into the fur-

¹ Dimensions: total width, 1.08 m.; depth from front edge to back wall, 0.21 m. (av.); height to horizontal cornice, 0.71 m.; total height to top of gable, 1.13 m. (top broken); total depth to back of curved niche, 0.36 m.; width of curved niche, 0.38 m. (av.); furrow in floor, left side, 0.44 m. by 0.07 m. (av.).

row in the floor of the shrine, though it is not certain that here was its original position.

At the right (δ in PLATE I) is a less elaborate but somewhat similar niche,¹ which also may have held reliefs or other votive offerings. One of the steps in the flight running from here nearly to the bottom of the cave is cut in the very floor of the niche itself. Here, too, is an interesting imitation of a pediment, with cornice in relief.

At the apex is an acroterium in the form of a theta (with point) (Fig. 3). This, in fact, seems to be the location of the illegible inscription mentioned by Dodwell (*op. cit.*, p. 555). The back wall of the niche is horizontally divided somewhat more than halfway up, and a slight change of level is made. This and the slope of the back make the exact use of the shrine a matter of doubt.



FIGURE 3. — STEPS DESCENDING INTO THE LARGER ROOM. NICHE WITH PEDIMENT AND ACROTERIUM.

More interesting than either of these niches is the headless seated figure hewn from the solid rock just beyond the main shrine (ρ in PLATE I and Figs. 2 and 4). This figure has been frequently described, with various conjectures as to its identity, which even after the excavation must remain in dispute. The head was made separate from the body, probably of some nobler material (marble or bronze) than the rest of the figure. The mortise by which it was fastened to the body is clearly discernible.

The figure is a little less than life-size and very crudely wrought. The proportions are incorrect, the body being too

¹ Dimensions: total width, 1.26 m.; height to horizontal cornice, 1.12 m.; height of deepened portion below cornice, 0.38 m. (only apparent at sides); width of cornice, 0.10 m.; height of pediment, 0.23 m. (inside); width of platform or floor, 0.52 m.; length of step in platform, 0.42 m.; width, 0.38 m.; depth, 0.19 m.

small for the long legs, while the arms are ungainly and confused with the arms of the chair. The forearms originally projected and have been broken off. The feet stand close together, and are pointed straight toward the front. The figure is now too mutilated to let one be sure whether they were shod or even whether they were modelled in detail. Nor is any



FIGURE 4. — SEATED FIGURE HEWN IN THE ROCK.

certain indication of sex remaining. Excrescences on the upper breast are perhaps the ends of locks of hair, and may indicate the femininity of the statue. An unsuccessful attempt is made to show the folds of the gown which fall over the knees, a shallow perpendicular furrow between the lower legs marking slightly their individuality.

The *θρόνος* on which the figure sits, and of which it is at the same time a part,

is made somewhat elaborately. The sides are panelled; the seat is cut under deeply; the back rises above the shoulders of the figure, and has a projecting strip on the end of the cross-bar. The whole rests on a platform which helps to give it a commanding position.

The identification of the figure has proved very puzzling. As has been said, the needful data are mostly wanting. Most visitors have assumed it to be feminine. Chandler's conjecture that it is Isis, the "Egyptian Ceres," has deservedly received

little favor. Ross saw in it the Greek Demeter. Milchhöfer in the *Karten von Attika* calls it "Rhea (?)," and perhaps the most generally received interpretation is the one given by him in another article¹ that it is the figure of Cybele. In confirmation of this view he calls attention to the lion's head found in another part of the cave (ξ in PLATE I). No external testimony has been found to any of these identifications. Absolute certainty is therefore impossible, and it is useless to multiply conjectures, though one might suggest other divinities or even Archedemus (p. 272: so Broughton, *l.c.*, and others).

Just beyond and a little higher than this seated figure is a curious rock-hewn object (γ in PLATE I and Figs. 2 and 4), omphalos-like in shape and resting on an elevated base. It is larger than the seated figure, and the top shows signs of a horizontal breakage which has deprived us of the upper portion. Below the present summit is a series of corrugated elevations resembling locks of hair and going quite around the free sides. At the bottom of the omphalos, on the side nearest to the seated figure, is a low elevation in the form λ. Other than these the surface shows no cuttings save those that have produced the ovoidal form. The nature of the figure is problematical. What has already been said proves that Chandler's conjecture of an *ithyphallus* is impossible, even had it not been antecedently unlikely. The clue to its true identity probably lies in the markings above mentioned. The hairlike ridges near the summit were actually intended to represent hair, and what is lost is a head with beard or flowing locks or both. The prominence on the side is ithyphallic. The omphalos becomes, then, a schematic torso in a form remotely like that of a herm, though perhaps Pan rather than Hermes is the god represented. This appears to be the view taken by some earlier travellers mentioned by Vischer (*l.c.*, p. 60).

Behind these two figures, and starting from the back of the *θρόνος*, is a steep and irregular bank of shelves. They seem to have been receptacles for small *ἀναθήματα* rather than for

¹ *Ath. Mitth.* V (1880), p. 217; cf. Roscher, *op. cit.*, 40ste Lieferung, p. 531, 9).

ascent. In the lowest is a mortise, apparently for the reception of the tenon of a marble relief (cf. PLATES III-V).

Above these shelves is another niche with the inscription Πανός (p. 295 and ς in PLATE I) beside it, the easier approach to which is from the entrance landing. So far as can be judged from measurements, none of our reliefs fitted there.

Descending the steps toward the bottom of the cave, one comes to another shrine (ϵ in PLATE I and Figs. 5 and 6). This, too, is hewn from the living rock. It has two levels,

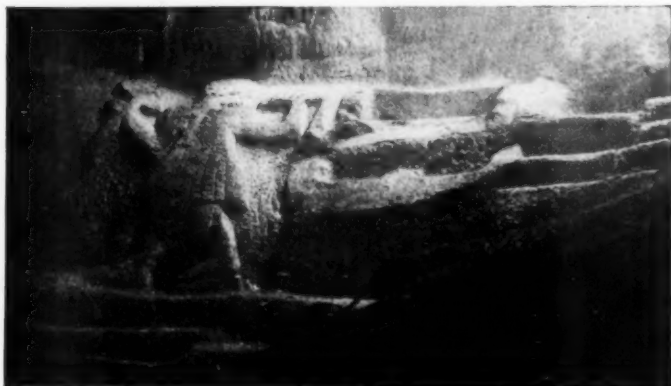


FIGURE 5.—FIGURE OF ARCHEDEMUS AND SHRINE OF APOLLO HESUS.

each being divided into two parts by a low partition.¹ In the floor of the upper niche are two D-formed concavities, perhaps designed for holding libations or small votive gifts. The lower divisions lack these receptacles, but may have had fitted into them two similarly concave stones of a different material which were uncovered, though the one of these which is intact does not fit very accurately. The drip at this portion of the cave is almost constant in wet weather, and one is led to think that the two small holes seen at the left of the upper level, together

¹ Dimensions: upper level, width, 0.80 m.; depth, 0.35 m. (broken in front); height of back, 0.19 m.; diameter of left hole, 0.13 m.; right, 0.19 m. by 0.11 m.; lower level, width of left section, 0.41 m.; right, 0.35 m. (broken in front).

with their mates on the opposite side, assisted in supporting a roof or other covering. It is possible that the two fragments of small fluted columns found in the excavation served for this purpose (or they may have been pedestals for statuettes or the like; no place could be found where they precisely fit). Unfortunately this shrine has suffered serious mutilation within the last few years, and a valuable inscription has been lost. The former position of this inscription is shown in the accom-



FIGURE 6. — FIGURE OF ARCHEDEMUS AND SHRINE OF APOLLO HERSUS.

(From Curtius und Kaupert, *Atlas von Athen*, Bl. viii, 2.)

panying reproduction of a drawing (Fig. 6), published in Curtius und Kaupert, *Atlas von Athen*,¹ which at the same time gives the most authentic reading, Ἀπόλλωνος Ἑρσου, "Of Apollo Hersus" (p. 296). No other indication of Apollo-worship has been found in the cave.

Next to this shrine is one of the most interesting features of the cave—the image of a man cut in low relief in the side wall (ζ in PLATE I and Figs. 5 and 6). The figure is that of

¹ Bl. viii, 2; also in Th. Schreiber, *Kulturhist. Bilderatlas*, I; *Alterthum*, Taf. viii, 5; and in Blümner, *Tech. u. Term. der Gewerbe u. Künste bei Gr. u. Röm.*, fig. 25.

a stonecutter bearing the tools of his craft, the hammer or pick, and the square. The word *Archedemus*, cut twice in the background before his face (p. 299), seems to be his name. The figure is a little above natural size¹ and is dressed in an *exomis*. It is mostly in one plane, and the workmanship is so crude and ineffective as to be ludicrous, though the artist, if he may be so termed, has apparently done his best to impart a lifelike aspect to his creation. The head of the figure is set back on the right shoulder, and is in profile and facing the entrance. The skull is much too wide for its height, and projects in front of the neck rather than rests upon it. The sculptor has succeeded, however, in bringing the head over the centre of the body, bad as is his system of articulation. Nose and forehead are run together into a balcony-like projection over the lower face. The eye is full front, and is set in the very middle of this projection, well down toward the region of the nostrils. The ear is but slightly indicated, at least in the portion intact. The mouth is a straight groove, starting from the lower angle of the nose. Arms and shoulders are much deformed. The right arm is attached to a protuberance from the body, rather than to the body, and the forearm is too long for the upper arm. On the left side an attempt to indicate the conformation of the shoulder and the swelling of the deltoid muscle has lowered the attachment of the arm, which is considerably smaller than the right, while this time the ratio of the lengths of the upper and lower arms is reversed. No further modelling of the muscles is attempted, but the fingers of the right hand are roughly indicated by two intersecting grooves. The cross on the right shoulder has as yet found no explanation; it may even be of Christian origin. The feet are large, ungainly, and directed away from the entrance. The sculptor has tried to give them the appearance of motion, but

¹ Dimensions: vertical height, 1.81 m., but figure slopes back nearly a metre from the vertical; total width of head, 0.33 m.; across shoulders, 0.565 m.; across skirt at bottom (8 folds), 0.72 m.; square, horizontal arm, 0.55 m.; vertical arm, 0.42 m.; hammer, handle, 0.512 m. by 0.09 m.; head, 0.39 m. by 0.115 m.

has not had the courage to cut away the block from beneath the uplifted foot. One cannot surely distinguish which foot is right, which left. At the waist a transverse groove marks the girdle, below which drop the stiff folds of the fustanella-like skirt to the region of the knees.

The tools which the man bears are portrayed with some clearness.¹ In the right hand is a sharp pick, such as the one with which much of the cutting in the cave was made. (The background of this relief manifests clear evidence of pick-dressing.) Owing to a break in the stone near the angle of the square which he holds in his left hand, this instrument has been taken to be a chisel-pick,² with which the workman is hewing away something near the shrine. This view, however, does not give an adequate explanation of the vertical branch of what is here called the square, and is finally excluded by the consideration that the other tool is a pick, not a mallet. The upper part of the man's body does indeed appear somewhat as if he were driving on a chisel, but most of this posture is due to the sculptor's inexperience. The position of the legs makes it certain that the artist meant the *ensemble* to be merely the form of a man walking along and carrying his tools, one in either hand.

A smaller but perhaps important shrine lies directly across this part of the cave. It consists of two simple shelves cut in the sloping rock of the floor, in the position shown in the drawing (*v* in PLATE I). Why this spot was chosen does not appear until we observe that the upper cutting is just at the outlet of a natural channel, which is now always dry, but which once must have had flowing-water. Whether or not this water was caught in a reservoir is not clear, though the presence of an overflow channel leading to the lower shelf favors this inference. At any rate, the natural chasm in the rock may well have been regarded as the veritable retreat of the nymphs, and so a shrine have been dedicated here in their honor. So steep is the floor of the cave below this spot that it is almost

¹ Cf. Blümner, *op. cit.*, III, p. 217.

² Cf. Wordsworth, *op. cit.*, p. 193.

impossible to stand upon it. For this reason apparently the wall which we uncovered (η in PLATE I; cf. Fig. 7) was built. It leads from near the bottom of the entrance steps across the cave, furnishing a level walk and a fairly large platform below this shrine. The theory thus advanced is favored by the pres-

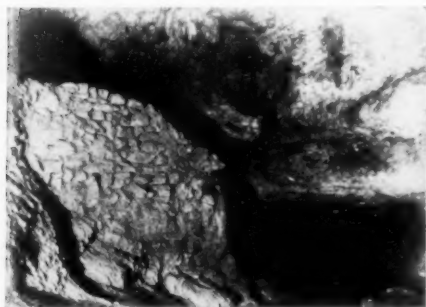


FIGURE 7. — PORTION OF THE WALL UNCOVERED.
A view is also given into the small side cave (p. 279).

ence of a curious backing of the wall at this level by means of a thin layer of the crushed and disintegrated crystalline stone found in the cave. With this substance every interstice behind and upon the upper stratum of the northern half of the wall, was filled,

and if the same material was originally strewn over the whole pathway, it must have made an attractive and substantial walk.

The passage from the larger into the smaller room of the cave is over the threshold (θ in PLATE I), cut between the dividing mass of rock on the right and the partial partition (about 2 m. high) on the left. Near this doorway the floors of the two rooms are on about the same level. This smaller room receives far less light from the entrance than the other and is always dark. The shepherds who visit the cave for water kindle fires with a bunch of wild thyme, and the smoke from such fires has blackened the sides and ceiling.

The water just mentioned is dipped from the spring (ϵ in PLATE I) in the lowest part of this room. The spring is about a metre in diameter, and half a metre deep. Though the cave is so near the summit of the mountain, the spring does not run dry. Usually it is cool and potable, but at the time of a visit in June it was brackish and thronged with mosquito larvae. Among the people of Vari it has the fame of possessing medici-

nal properties ("καθαρτικό"), but in all probability it contains no other mineral ingredients than the carbonated water usual in such caverns, though Glauber's salts are said to be sometimes held in solution in subterranean waters. Unfortunately the water in the cave has not been analyzed.

The stalactitic formation in this section of the cave (Fig. 9) is more perfect than in the larger room, where the walls have been partially smoothed and the stalactites broken away. Indeed, we are told by Dodwell¹ that M. Fauvel, French consul at Athens, carried off some of the stalactitic material, "but it was found to be of a friable quality and unable to resist the sculptor's chisel."

The nature of a rectangular pit halfway up this room (μ in PLATE I) was not discovered until after the excavation (p. 282).

A little farther toward the entrance a very illegible inscription is cut in the carelessly smoothed wall at about the height of the eye (σ in PLATE I). The surface is so irregular that it proved impossible to make a "squeeze," but an attempt to decipher the letters is reported in a later paper of this series (p. 296). Just above the floor-level, and almost beneath this inscription, is an apparently unimportant niche roughly hewn in the side wall. It may, however, have some connection with the inscription.

Directly across the room from these is yet another niche (ν in PLATE I) similar to one of Pan previously mentioned (p. 270). It contains a D-formed receptacle in its floor like those before described. A careful examination of its sides discovered what has not been noted heretofore, the back portion of a head, presumably feminine—to judge from its flowing hair. (For location see blackened spot at ν in PLATE I.) Not enough is preserved to allow a study of its features, but the knowledge of its presence is valuable. Underneath the niche is cut the word *Χάριτος* (for the last letter see p. 295). The singular number of the word seemed strange at first, but the discovery of this head explains its presence, the inscription

¹ *Op. cit.*, I, p. 552.

having been cut without doubt after the carving of the head, which very likely was the amplification of some natural protuberance of the rock.

A few steps farther is another projection of the rock, a metre or so above the floor, this time wrought into the form of a lion's head (§ in PLATE I). This was mentioned in connection with the "Cybele" statue of the large room. Time has treated it so harshly that it is almost unrecognizable except for the conventional rolls of hair behind the ears, and for the general outline of the face.

With this the circuit is completed, and one stands again on the landing, looking out from the entrance. Before leaving the description, however, a word may be said with regard to the sectional drawings in PLATE II. The first is made along the line *AA'* of the plan of PLATE I, passing by the side of the seated figure, which is shown in perspective. The other is made along the line *BB'*, and reveals the depth of the cave below the surface of the mountain, the relative levels of the two rooms near the entrance, the end of the rock partition dividing the cave, and the wall crossing near its bottom. The shaded portions above the sloping floor in each section show the earth removed in course of the excavation.

The impression made upon the visitor by the cave and its simple sanctuaries is very profound. Many expressions of it might be cited, and it may conduce to a better understanding of the environment to read Ross's appreciatory comment.¹ "Ich kenne," he says, "in ganz Griechenland, von neueröffneten Gräbern abgesehen, keinen Ort, wenigstens kein Heiligthum, wo sich der heutige Beschauer so unmittelbar mit dem Alterthum in Berührung gesetzt empfindet wie hier. Seit dritthalbtausend Jahren ist Alles in dem alten Zustand geblieben: der Fels, seine Reliefs, und Inschriften sind unverändert, es fehlen nur die frischen Kränze, der Opferduft, und die Gebete und Gesänge der Opfernden um uns ganz in das Leben des alten Cultus zurückzusetzen."

¹ *Op. cit.*, p. 76.

It is to a remark of Milchhöfer,¹ coupled with the personal impression gained upon a visit to the cave, that the decision to attempt the excavation was due.²

The work was begun at the close of the rainy season, February 20, 1901, and continued until March 1. Ten men were employed in the work—all that could be used to advantage. The fact that the work was under ground limited our operations within set boundaries, and at the same time interposed a number of difficulties. It was impracticable to convey to a spot so far from Athens and so high up the mountain the windlass which was desired, even if such apparatus had been easy to procure. This lack forced us to have the earth drawn from the cave by hand ropes in baskets through a narrow space in the opening. An artificial source of light had to be used for most of the work. All the earth that was removed was carefully examined within and without the cave, while that which had to be left inside was inspected repeatedly before it went to the dump. The same exigencies of light rendered it difficult to secure satisfactory photographs of the interior, and those presented with this article were taken by "flashlight."

The work was begun just in front of the seated figure (pp. 267 ff.) without much notion of what depth of earth would be found, but with some expectation that here it would be greatest, this region being near the entrance whence the earth seemed likely to have fallen. Such anticipation proved to be unfounded, for the depth was but a quarter of a metre, and increased from here to the bottom of the cave.

The earth first moved was of comparatively recent deposit, and contained no antiquities. Three and a half metres in front of the statue, however, a number of red-figured vase fragments were uncovered, together with one or two complete aryballi

¹ *Karten von Attika: Text. I.c.* "Weiter abwärts ist der Boden mit Schutt erfüllt, welcher einer Durchsichtung wohl werth wäre."

² The expenses of the excavation were defrayed by Professor Perry, Professor Dunham, Miss King, and Miss Thallon. See *Am. Journ. Arch.*, V (1901), Suppl., pp. 21 and 26 f.

and a small piece of a relief (the feet of the figures in relief No. I, PLATE III). Here, too, as in other parts of the cave, a small number of bones of various animals — none human — were found. These were nowhere in heaps or in large quantities, and probably were for the most part brought into the cave in flesh used for sacrifice or food, or were the bones of animals that accidentally died in the interior. No further significance seems to attach to them. A score or so of goats' horns were scattered through the cave. While frequent signs of burned wood and small piles of ashes were observed, these were in no wise so placed as to hint at their time or at any special function.

While the work was progressing near the entrance a trench was begun at the bottom of the cavern, where, after the removal of the first layer, consisting mostly of stones, the constant discoveries of potsherds and terra-cotta lamps soon made it evident that we had most to expect in this quarter. One of the earliest finds was the largest piece of No. VI of the marble reliefs (PLATE VIII) which lay close to the surface of the soil.

The trench from above was continued past the Archedemus-relief and joined with the trench below, the earth being drawn up and reëxamined outside the cave. In this region no stratification was found. The soil was a dark loam, often charged with water, easy to dig but heavy to handle. In this numerous potsherds were found, a few statuettes, a few lamps, and a number of copper coins. These were completely intermingled, a basketful from one spot often containing representatives of several of these varieties in such a way that no chronological differentiation could be made. As soon as the trenches were connected, the whole force of workmen was set at work clearing the lower one where the depth was proving greater. At the northern end near the partition the soil was entirely without antiquities and the depth was not more than a metre. Toward the outer end, however, the finds were frequent. Pieces of marble, vases, statuettes, and many lamps were collected, the different kinds being mixed.

As the level was gradually lowered, at the extreme southern end we were surprised to find that the mouth of yet another room of unknown dimensions was being uncovered. The entrance of this had never been entirely closed, but the collected *débris* had kept it from observation. As soon as the space permitted, this room was entered, and upon the very surface of the heap of stones within, pieces of pottery, part of a relief, and the inscription No. 9 (p. 293) were found. The length of this room proved to be but five metres, yet as the amount of material to be removed appeared to be considerable, work here was postponed until the main trench was cleared. As this was gradually widened the men came upon the northern extremity of the wall already mentioned (p. 274). The work was then continued below this wall, which was of assistance in supporting the earth and stones above.

In this region below the wall and before the mouth of the small room the only stratification was noticed (see PLATE II, lower part of section A). Even here the strata were not clearly defined, and, save in the two lowest, were only distinguished by the variation in the character of the finds. In the stratified region the upper and stony layer (Fig. 8) shaded off into a less rocky soil, the whole being—in front of the small room—about 0.50 m. in depth. In this were great numbers of lamps—a single pull of the mattock often uncovering several—together with fragments of pottery of widely differing varieties, pieces of marble reliefs, and coins. Upon digging deeper it became evident that a stratum of an earlier period had been entered, whereupon the work in that stratum was stopped until the upper layer was cleared away, after which the “Hellenic layer” was removed. In this the objects found were uniform in kind, for the most part Greek vases and terra-cottas. The space they covered was that embraced between the wall and the west side of the cave; the depth was about 0.30 m., becoming thinner as it approached the northern end of the wall. Immediately below, a distinct demarcation was seen between this and the next level, which was of firmly packed

yellow earth resembling virgin soil, hard and difficult to penetrate. This formed a level platform a little smaller than the area just defined, and about 0.25 m. thick. Beneath this was the lowest stratum, a mass of small stones a metre and less in thickness,¹ and with no intermingling of soil. Absolutely no antiquities were present in either of these lower layers, and so definite were the lines of demarcation that it is clear



FIGURE 8.—INTERIOR VIEW AS THE EXCAVATION WAS BEGINNING.
One of the laborers' baskets is visible near the centre.

that the work was in its original form as constructed by some occupants of the cave. A possible use for it is suggested on the next page.

After this area was cleared, it was possible to continue the work in the small room. The stratification ceased at the entrance; indeed, there were some indications that it had been originally bounded by a curbing of stones. The objects found were mostly of Roman date, but with some Greek pottery and statuettes. The most important discoveries here were the fragments of the reliefs, which were more numerous than elsewhere. These with other stones were so closely packed to the

¹ This layer was thicker near the entrance to the small room than at the spot where section A in PLATE II crosses.

ceiling that there can be no doubt of their having been thrown in, as into a refuse heap.

Since so much earth had been found in the lower part of the cave, the question as to where it should be dumped had become serious. To have lifted out the mass of stones and earth with the inadequate apparatus at our command would have trebled the duration and cost of the excavation without any important gain. It was thought best therefore to leave in the cave much of the earth excavated below the wall. A stone enclosure was built (see dotted lines in PLATES I and II), and into it the earth after repeated examination was thrown.

The dirt that had been left just above the wall was now to be removed. The objects found here were of little value, and their mixed character continued as before.¹ The wall, contrary to what had been expected, was not a retaining wall and had little earth behind it (see PLATE II), but followed the contour of the floor. From the structure of the wall (Fig. 7) no precise judgment is possible as to its date. A portion of the north end was torn down for the purpose of examination; the remainder was preserved intact. The photograph shows the spur projecting to the west.

It is certain that there was some occupation of the cave prior to the building of the wall, for behind, and sometimes partly covered by it, were a number of shallow and crude niches in the steep floor. These may be supposed to have been in use, perhaps for votive offerings, when the earth platform below was constructed. This platform would have been a suitable place for the stately dance, possibly past the altar of Pan as portrayed in several of the reliefs. The darkness of the grotto with its flickering lights would have made such worship weird and impressive in the highest degree. At that time the "shrine of the nymphs," if it existed, must have been reached by climbing over the rocks; later the path along the wall was

¹ The following are among the things taken from baskets filled here: a few fragments of terra-cotta lamps, a quantity of pieces of black-glazed pottery, handles of scyphi or cylixes, aryballi, etc., a moderate amount of coarse red ware.

built and the old niches abandoned. This was probably done toward the end of the Greek occupation.

In the smaller division of the cave the depth of soil was everywhere very slight and no antiquities were discovered. The only evidence of human handiwork in the lower end of this room is a rude stairway (visible in Fig. 9) leading over the steepest part of the slope. The pit near the side of the room (p. 275), on being cleared, was seen to have been a cistern or reservoir. Vestiges of a plaster lining are extant, and

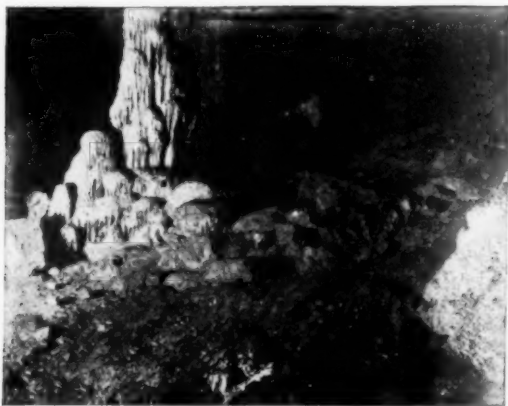


FIGURE 9. — INTERIOR OF THE SMALLER DIVISION OF THE CAVE.

an inlet drain is cut at one end. This pit was thought by Chandler to have contained the "garden" mentioned in one of the inscriptions (No. 17, p. 298), but doubtless—as its position in the darkness should attest—incorrectly. The significance of a square depression at the bottom, in whose centre is sunk a circular hollow, we could not ascertain.

The antiquities discovered in the cave are of several different varieties—reliefs, coins, inscriptions, statuettes, vases, lamps. Their more detailed treatment is taken up in the following papers of this series. It is therefore unnecessary to enumerate or to comment upon them here.

The evidence being now in hand, an attempt may properly be made to sketch the history of the cave. From the character of the material, it will be manifest that relative and not absolute chronology is alone possible.

The excavation failed to reveal prehistoric remains, which might have been expected, and which are often found in similar situations.¹ The occupation would seem therefore to have begun during the historic period.

The earliest artificial construction in the cave is undoubtedly the level area at the very bottom. Being below all the other strata, it must have been prior to them in time, though no exact date can possibly be assigned to it. It has already been described, and the total lack of antiquities in it has been remarked as well as the niches which were used in connection with it. It is not impossible that these remains were synchronous with one or both of the oldest inscriptions. The first of these is an unhewn triangular stone bearing the legend "Of Epicharides," and dating from about the beginning of the sixth century B.C. (No. 7, p. 292). The inscription is probably sepulchral, but was not found *in situ*.

If the similarity to the Branchidae statues may offer a suggestion, we might assign as next in order of time the carving of the seated figure (pp. 267 ff.), that is, at about 550 B.C. But as we have seen, the crudeness of the work in question makes it difficult to have confidence in such an assumption. As in the case of the Archedemus relief, this may be the product of ignorant and unskilled hands of a much later date.

The date for the dedicatory inscription of Αἴπολος, "Seyron's son" (if the reading be correct; see p. 293) may be set not much later than this, perhaps 475 B.C. Again we are left to guess the exact meaning of the inscription, and are unable to determine the nature of the object (τόνδε) which was dedicated to the nymphs. The personality of all the individuals is utterly lost to us.

From the comparative abundance of references to "Archede-

¹ *E.g.* in the cave at Miamu, *Am. Journ. Arch.*, 1897, pp. 287 ff.

mus the Therean," we are forced to believe that his time was the heyday of the earlier worship in the cave. We shall see that there are serious difficulties in the way of determining the date or dates of the inscriptions which bear his name (p. 300). Since the relief is not more easily dated, it is best to be content with indicating his *floruit* as 400 B.C. The material evidences of his work in the cave are the relief, the deeds detailed in the inscriptions, with perhaps the construction of the steps. These were very likely accompanied by a revival of the worship of the Nymphs.

The fourth and third centuries are well represented by the excellent series of marble reliefs with their dedicatory inscriptions in the completed Ionic alphabet, as also by the numerous vases and statuettes. The closing relic of Hellenic habitation is the coin of Athens of the second century B.C. (p. 335).

This brief *résumé* is sufficient to make it apparent that there was a more or less continuous occupation of the cave for more than four hundred years — from about 600 B.C. to about 150 B.C. (The coin of Athens is to be dated 220–86 B.C., and the statuette of Pan, PLATE X, 7, is also of this period.) It is with surprise, then, that we now encounter a break of four or five centuries. At least, we have no material that seems to have had its origin during this long period. If we may judge from the dating of the other coins, of which 147 were found in various parts of the cave (pp. 335–337), the next important occupation began at about the time of the reign of Constantine the Great (307–337 A.D.), while if mere numbers permit us to make an inference, the cave became a more popular resort during the time of his successor, Constantius II (337–361 A.D.), forty-six of whose coins are in our collection. From this time the cave seems to have been frequented continuously down to the reign of Arcadius (395–408 A.D.), coins having been found of most of the emperors who reigned during this period — Eastern and Western alike. This makes it patent that after the long time of abandonment, the cave began at the beginning of the fourth century of our era to be put to a new use — that

of a Christian shrine. Testimony to such occupation is found further in the large number of lamps (pp. 338-349), belonging almost exactly within the century just defined, a large part of them being of Christian manufacture, or at least adapted and stamped (with the chrismon) for Christian use. A small iron seal-ring bearing the image of the cross was also found. It seems not unlikely that the old votive offerings, the reliefs, the terracottas, the vases, etc., had remained up to this period comparatively intact, and that this was the time of their demolition. Particularly in the case of the reliefs, we shall see that the breakage is entirely too thorough (p. 302) to permit the supposition that it was accidental — especially when we recall that so many of the pieces were found in the "refuse heap" in the small room (p. 279).

The cave was probably always the resort of poorer people. While some of the offerings bear evidence of painstaking care and enthusiastic worship, there are none of real intrinsic worth.

There remains one question to which it is hard to give a satisfactory answer. How can so large a quantity of earth have found its way into the cave? One would be inclined at first thought to say that, in the course of the fifteen centuries since the end of the active use of the cave, the earth had fallen in through the opening and washed down over the floor. This cannot have been the case to any considerable extent. Had the earth entered in this manner, a large part of it must have fallen directly into the smaller division, which, as we have seen, was almost empty, while what fell into the larger room must have remained in greater quantity near the entrance, where in fact the depth was least. Furthermore, the surface of the mountain above the mouth of the cave is of bare rock (Figs. 1 and 10), and probably was in antiquity. Finally, we must remember the thorough commingling of the various finds and the character of the "refuse heap" in the side room. In view of these facts it is necessary to conclude that the earth was conveyed into the cave by human agencies. When, why, and whence this was done are matters for conjecture. The follow-

ing is suggested as a partial explanation. Upon the wall which crosses the cave we found a number of more carelessly placed stones, furnishing some evidence of a later Christian addition, raising its height to an unknown extent. This may constitute

the remains of an attempt to build up the wall into a real terrace wall, behind which earth and stones were thrown in order to create a level space in the upper part of the room. The accidental or intentional overturning of this upper wall and



FIGURE 10.—GROUP OF LABORERS NEAR THE ENTRANCE TO THE CAVE.

platform would in part account for the quantity of earth and *débris* at the bottom of the room, as well as for the other phenomena mentioned.

There seems to be no ancient literary mention of the cave. Some (as Chandler, *l.c.*, p. 167) have tried to see such a reference in Strabo IX, 398: *περὶ δὲ Ἀνάφλυστόν ἐστι καὶ τὸ Πανεῖον καὶ τὸ τῆς Κολιάδος Ἀφροδίτης ἱερόν, κτλ.* This, however, is very doubtful. Anaphlystus is located with much certainty near the southernmost point of Attica,¹ and not far from it is the large cave on Mt. Elymbo which appears to have kept a distinct trace of the old name in the modern appellation for its eastern peak, Paní.² Since Strabo also mentions so distant an object as the temple at Colias (whether Colias be at Phalerum or at Ἄγιος Κοσμάς; cf. Frazer, *Pausanias*, II, 35 f., V, 478)

¹ Löper, *Ath. Mitth.*, XVII (1892), p. 331; Milchhöfer in Pauly-Wissowa, *Real-Encycl.*, s.v.

² See Leake, *op. cit.*, p. 61; Vischer, *op. cit.*, p. 68; Ross, *op. cit.*, p. 77; etc.

as near Anaphlystus, it may be that his Paneion is this one at Vari.

But of far more interest to us is the inference which would connect Plato with our cave, as first suggested by Curtius. This conclusion is based on the testimony of Aelian and Olympiodorus, whose words are as follows: Aelian, *Varia Historia*, 10, 21: ὅτι τὸν Πλάτωνα ἡ Περικτιόνη ἔφερεν ἐν ταῖς ἀγκάλαις, θύοντος δὲ τοῦ Ἀρίστωνος ἐν Ὑμηττῷ ταῖς Μούσαις ἢ ταῖς Νύμφαις, οἱ μὲν πρὸς τὴν ἱερουργίαν ἦσαν, ἡ δὲ κατέκλινε Πλάτωνα ἐν ταῖς πλησίον μυρτίαις δασείαις οὖσαις καὶ πυκναῖς· καθεύδοντι δὲ ἑσμὸς μελιττῶν ἐν τοῖς χείλεσιν αὐτοῦ καθίσασαι ὑπῆδον, τὴν τοῦ Πλάτωνος εὐγλωττίαν μαντενόμεναι ἐντεῦθεν. Olympiodorus, *Vita Platonis*, p. 1: τὸν Πλάτωνα λαβόντες οἱ γονεῖς τεθείκασιν ἐν τῷ Ὑμηττῷ βουλόμενοι ὑπὲρ αὐτοῦ τοῖς ἐκεῖ θεοῖς Πανὶ καὶ Ἀπόλλωνι καὶ Νύμφαις θῦσαι. The sum of what these passages — which are late and derived from a source of unknown authenticity — relate is, that the infant Plato was once carried by his parents, Aristo and Perictione, to some spot on Hymettus, and that sacrifices were there performed in the young Plato's behalf to Pan and Apollo and the Muses and the Nymphs; that while the religious ceremonies were in progress Perictione placed the child in some myrtle thickets near at hand, where a swarm of bees rested on and hummed about his lips, prophesying his future mellifluence.

From this statement it is certainly too bold to assert with Curtius (*Atlas von Athen*, l.c.) that Olympiodorus says, that Plato "zu einer Grotte des Hymettus getragen sei," no cave being mentioned by either Olympiodorus or Aelian. We have seen that in the cave at Vari, Pan, Apollo, the Nymphs, and Graces were the chief of the divinities honored. The fact that this list is so nearly identical with the combined list of Aelian and Olympiodorus, and that no other spot on Hymettus is known to have been sacred to these gods, composes the basis for assuming that the action of this most interesting scene took place — if indeed it did take place, wholly or in part — at our cave. Obviously, the evidence is too frail to permit us to esti-

mate with certainty its value. Yet one has pleasure in subscribing — with one modification — to Curtius's further comment, "So lange also nicht eine zweite Athen benachbarte Hymettosgrotte [he might more exactly have said *Hymettosort*] gefunden ist, wo dieselben Gottesdienste bezeugt werden, dürfen wir immer zuerst an die Grotte bei Vari denken."

CHARLES HEALD WELLER.

NEW HAVEN.

THE CAVE AT VARI

II

INSCRIPTIONS

TWENTY inscriptions have been found in the cave at Vari. Of these the first ten as here published, and two fragments of the stone containing Nos. 16 and 17, were uncovered during the recent excavation. The others have been repeatedly published, — notably, of course, in the *Corpus Inscriptionum Atticarum* (I, 423-431), — but are here given again with all possible accuracy and with facsimile copies from photographs and “squeezes.”¹ With the exception of No. 7, which remains in the cave, the inscriptions on detached stones are now in the National Archaeological Museum at Athens.

For the inscriptions on vases, see below, pp. 325 ff.

I. SIX DEDICATORY INSCRIPTIONS CUT ON THE MARBLE RELIEFS (pp. 301-310 and PLATES III-VIII)

1. At the top of relief No. I (p. 302 and PLATE III). Height of letters, 0.0175 m. to 0.025 m. The stone is much encrusted, and the part containing the last letter or letters is broken off.

ΗΡΕ ΚΛΙΔ ηρε κλιδ

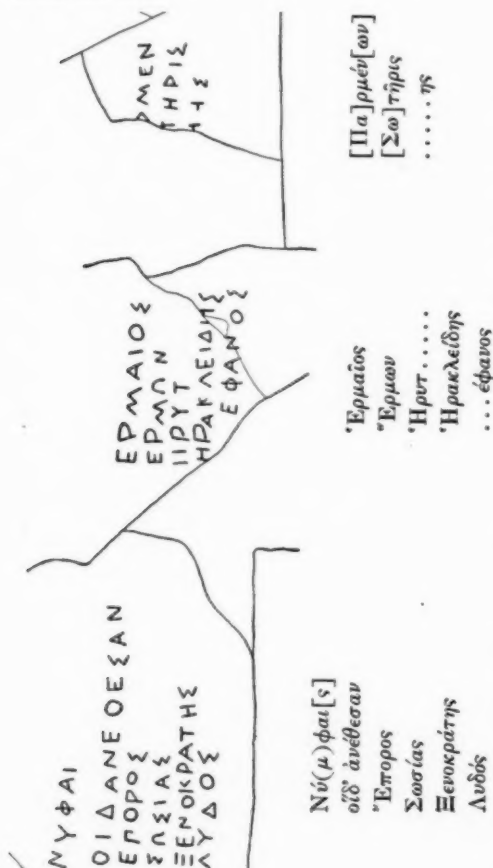
2. At the bottom of relief No. II (p. 304 and PLATE IV). The inscription is cut on a surface 0.51 m. long and 0.025 m. to 0.03 m. wide. Length of inscription itself, 0.425 m. Height of letters, 0.010 m. to 0.015 m. The work is careless and the letters are hard to decipher, but the reading is sure.

¹ Most of the facsimiles and photographs are reproduced to scale, as follows: Nos. 1-10, $\frac{1}{4}$ natural dimensions; Nos. 11-13, 18, 19, $\frac{1}{25}$ natural dimensions; Nos. 16, 17, 20, $\frac{1}{10}$ natural dimensions; Nos. 14 and 15 are not drawn to scale.

ΕΥΚΛΕΙΔΗΣ ΕΥΚΛΗΣ ΣΑΚΡΑΤΗΣ ΝΥΜΦΑΙΣ

Εύκλειδης Εύκλῆς Λακράτης Νύμφαις

None of the persons can be identified. It seems not improbable that this Εύκλῆς is the same as the one in No. 6. Perhaps, therefore, all the men mentioned in these two inscriptions are from the deme of Halae, which was but five or six kilometres from the cave.



3. At the bottom of relief No. III (p. 306 and PLATE V). The inscription is cut on a surface 0.70 m. long and 0.11 m. wide. The original surface has been roughly chiselled away, probably to erase a previous inscription. The present letters are very shallow, and in some places illegible. Height of letters, about 0.01 m.

For the omission of μ in Νύμφαις, see Meisterhans, *Gram. d. Att. Inscr.*², p. 84, 2. The name *Ερπορος is found nowhere else, and seems not to be Attic (cf. Pape-Benseler, *Wörterbuch d.*

Gr. Eigennamen; Fick-Bechtel, *Gr. Personennamen*; Kirchner, *Prosopographia Attica*; etc.). The reading of the third name in the second column is very doubtful. For Σωτήρις (masc.), see *C.I.G.* IV, 6999. None of the persons can be identified. Worth noting is the fact that several of these names are common names for slaves.

4. At the bottom of relief No. IV (p. 307 and PLATE VI). Both ends of the inscription are broken so that the termini cannot be defined. Height of letters, 0.010 m. to 0.015 m.

Σ Π Ε Ι Θ Ι Ο Υ Α Πειθίου Α.....

The second iota is engraved over an erasure. Πειθίας cannot be identified, though the name is found several times in inscriptions.

5. At the upper right-hand corner of relief No. V (p. 307 and PLATE VII). Length of inscription, 0.09 m. Height of letters, about 0.01 m.

Ν Υ Μ Φ Α Ι Σ Νύμφαις

6. At the bottom of relief No. VI (p. 309 and PLATE VIII). The inscription is cut in a surface 0.69 m. long and 0.03 m. wide. Length of inscription itself, 0.32 m. Height of letters, 0.01 m.

Ε) (ΣΛΑΚΛΕΟΥ) (ΛΑΙΕΥΣ

Ε[ύκλ]ῆς Λακλέον Ἀλαιεύς

Neither of the persons mentioned can be identified. For Εύκλῆς, see also No. 2. The name Λακλῆς or Λακλῆς (cf. Δημοκλῆς) is not found elsewhere. For the form of the genitive Λακλέον, see Meisterhans, *op. cit.* p. 133, 8, with remark on date there given ("Seit 350 v. Ch. begegnen vereinzelte Formen auf -κλεον, die aber nicht durchdringen und später wieder verschwinden").

II. FOUR INSCRIPTIONS ON DETACHED BLOCKS

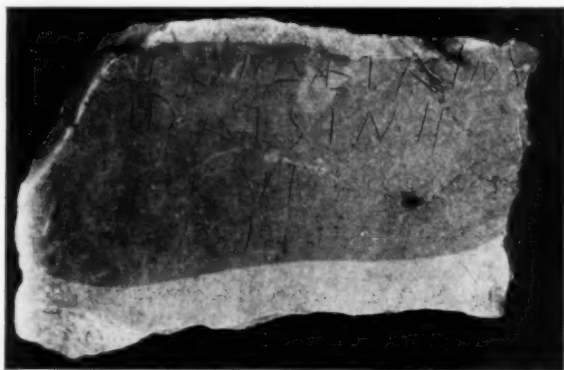
7. Across the shorter side of an unhewn and irregular slab of limestone, triangular in form, and about 0.40 m. long, 0.35 m. wide, 0.10 m. thick. Height of letters, 0.025 m. to 0.050 m.



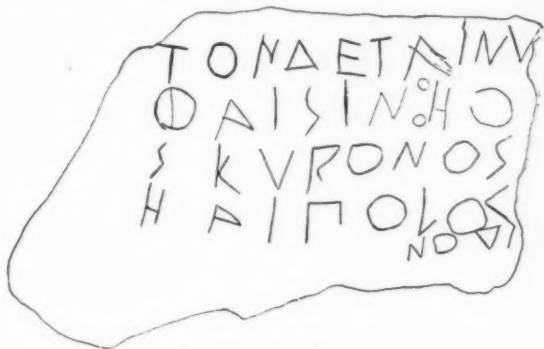
Ἐπιχαρίδο

Retrograde. The style and the letter forms are very similar to those of the well-known Ἐνιάλου inscription (*C.I.A.* I, 467; Roberts, *Introd. to Gr. Epig.* p. 76, No. 37; Conze, *Die Att. Grabreliefs*, I, p. 10), the shapes of the stones being also somewhat alike. The date of the Ἐνιάλου inscription is set by Roberts near the beginning of the sixth century. The stone probably served for a tombstone.

8. On a slab of brownish sandstone about 0.18 m. high, 0.30 m. wide, 0.14 m. thick. Height of letters, 0.015 m. to 0.040 m.



(The differences in color are due to faulty development of the photographic plate.)



τόνδε ταῖ(ς) νύ(μ)-
 φαισιν · ἡο
 Σκύρωνος
 ἡΑἰπόλος (or ἡαιπόλος)

The syllable *δον* was already on the stone when this inscription was cut, the slab having been inverted for the later use. For the omission of the *ς* in *ταῖς* before *ν*, see Meisterhans, *op. cit.* p. 91, n. 826. For the omission of *μ* in *νύμφαισιν*, see note on No. 3. Another inscription, in which the customary order of name and father's name is reversed as here (unless we should read *ἡαιπόλος*, the *goatherd*), is published by Mylonas in the *Bull. Cor. Hell.* III (1879), p. 179 (*C.I.A.* IV, 477, 1), — an inscription of the sixth century B.C. The names *Σκύρων* and *Αἰπόλος* are each known from one previous source (respectively, Messenian and Thessalian, not Attic; see Pape-Benseler, *op. cit.*, s.v.). The inscription is cast in a crude metrical form, as follows:

—υ|—>|—υ|—>|—υ|—υ|—.

9. On a slab of limestone broken off at the right. Height, 0.28 m.; greatest width, 0.36 m.; thickness, 0.08 m. Height of letters in second and third lines, 0.04 m. to 0.055 m.; height of *⊙*, 0.08 m.

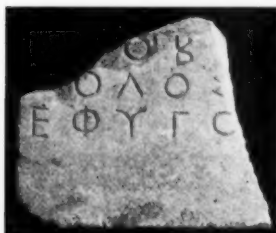


Θ
ΚΑΛ
ΡΙΚΟΝ

Θ.....
καλ.....
ρικόν (ὁρ ρικῶν)

One is at first tempted to restore ΘΕΟΙ in the first line, but this formula belongs to Attic decrees, its use in these beginning in 433 B.C. (Larfeld in Müller's *Handbuch*, I, p. 560), while our inscription is manifestly of a much earlier date — but perhaps the first character is not a letter.

10. On a fragment of a white marble slab, the left and bottom edges of which are whole, the others broken. Height on the left, 0.075 m.; greatest height, 0.11 m.; width at bottom, 0.15 m.; thickness, 0.04 m. On the back, which is rough, is a raised margin along the bottom 0.04 m. high, 0.0075 m. thick. Height of letters, 0.012 m. to 0.018 m.



.. οβ.....

δολος...

εφυγον...

στοιχηδόν. The letters are carefully cut. The third line may read *ἔφυγον*, the letters of the first and second lines belonging to names which are the subject; but *-δολος* can scarcely be a nominal suffix.

III. FIVE INSCRIPTIONS CUT IN THE WALLS OF THE CAVE

11. In the living rock below a niche in the smaller division of the cave (p. 275). Length of inscription, 0.715 m. Height of letters, 0.12 m. to 0.16 m. (*C.I.A.* I, 428.)

ΧΑΡΙΤΟΣ Χάριτος

The *ς* at the end is certain, instead of *ν* (cf. *C.I.A.* *l.c.*). See p. 275 for a possible explanation of the singular number.

12. In the living rock below a niche in the larger division of the cave (p. 266). Length of inscription, about 0.60 m. Height of letters, 0.10 m. (*C.I.A.* I, 429.)

ΠΑΝ ΟΥ Πανός

The inscription is visible in the photograph on p. 266 (Fig. 2). The long interval between the *ν* and the *ο* is due to inequalities in the rock. This inscription and the one following must, from the forms of the letters, be dated not far from the time of the introduction of the worship of Pan into Attica.

13. In the living rock below a niche above No. 12 (p. 270), and a repetition of it. Length of inscription about 0.485 m. Height of letters about 0.10 m. (*C.I.A.* I, 429.)

ΠΑΝΟΥ Πανός

14. In the living rock below a niche in the larger division of the cave. The inscription has now disappeared. Its former position is shown in Fig. 6, on p. 271. (*C.I.A.* I, 430.)

Ἀπόλλωνος . Ἐρσου

The inscription had not entirely disappeared in 1887-88, at the time of the visit of Milchhöfer (cf. *Karten v. Attica*, Text, *l.c.*), who remarks that it was then "frevelhaft verstümmelt."

15. In the living rock, nearly opposite the Χάρτος inscription (No. 11), in the smaller division of the cave (p. 275). The inscribed area is partially smoothed along the left margin over the space occupied by the first two or three letters in each line; the remainder of the surface is exceedingly uneven and is blackened by smoke. The right-hand limit cannot be determined. In the following copy an attempt has been made to reproduce the letter forms and their relative positions as accurately as possible, but several of the characters are very obscure. In some places it is impossible to differentiate natural depressions from artificial. No squeeze could be made. (*C.I.A.* I, 431.)

ΙΤΑΝ ΕΔΕΧ
Σ ΟΚΛΥΤΕΙΤ
ΚΑΙΤ ΟΝΟΜ
ΘΟΝ ΝΙΤΕΓΕ



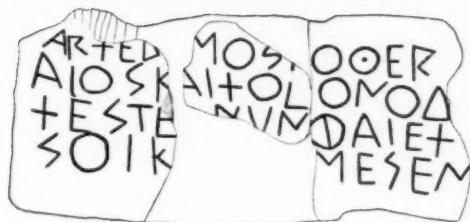
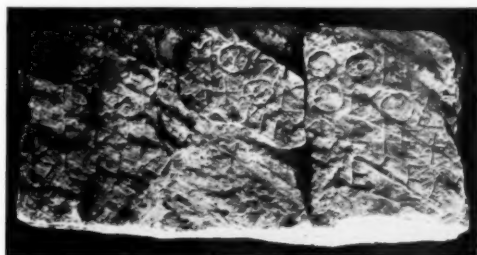
The reading is so doubtful that no transliteration is attempted.

The first character in the first line appears like a natural hollow, being deep while the other markings are shallow, but its position relatively to the Σ of the second line would argue for its literal nature. The letter after Α, in the same line, has usually been read Ν; there are now, however, no decisive traces. Following this is room for another letter, which may have read Τ (so *C.I.A. l.c.*), but this too is now illegible. The Χ forms the end of this line, and beyond it is a natural cavity several centimetres deep and showing no signs of letters. In the second line the sixth letter may possibly be Ι, instead of Τ. After the Ε of this line is an irregular ridge about a centimetre high and extending down into the next line. All the letters to the right of this ridge are especially defaced and illegible, so much so

that their existence is unnoticed in earlier copies. Natural and artificial markings are scarcely distinguishable. In the fourth line the first three letters seem to me sure. They were so read by Milchhöfer (*l.c.*; cf. *C.I.A.* IV, 1, p. 155), in contradistinction to the reading in the *C.I.A.* I, 431.

IV. FIVE INSCRIPTIONS RELATING TO "ARCHEDEMUS THE THEREAN"

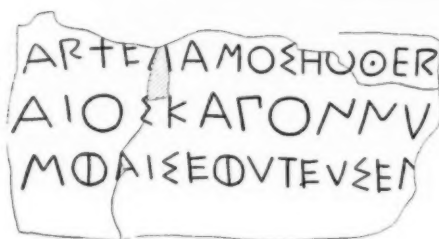
16. On a block of shaly rock broken into fragments, of which four remain. The largest has been for a number of years in the National Museum at Athens (cf. *C.I.A.* IV, 1, p. 45). The elliptical fragment split off — together with a part now lost — since the publication in the *C.I.A.*, was rediscovered during the excavation, when the large piece at the right end (left in No. 17) was found also. The original surface has chipped off in spots so that part of the letters are hard to decipher. Length of complete block, about 0.70 m.; height, 0.35 m.; thickness, 0.15 m. Height of letters, 0.04 m. to 0.06 m. (*C.I.A.* I, 421.)



Ἀρχεῖδ[α]μος ὁ Θερ-
αῖος καὶ χολονοδ-
χες τῇ νύμφαι ἐχ-
σοικ[οδό]μεσεν

The $\chi\omicron\lambda\omicron\nu\omicron\delta\chi\epsilon\varsigma$ has not been explained. Strange as the word (or words) seems, it is apparently in its original condition. A small bit of the stone is gone at the end of the second line, but hardly enough to have contained an additional letter; furthermore, as the inscription now stands, each of the first three lines has the same number of letters (fourteen), and this is probably an intentional uniformity. The first letter of the third line is certainly χ ; not Δ , as in the *C.I.A.* It is evident that the time-honored association of Archedemus with the deme of Cholleidae, according to Chandler's emendation of this inscription, is wrong. In the third line the reading $\tau\epsilon\iota$ (for $\tau\hat{\alpha}\iota$) is probable, but not absolutely sure, owing to breakage of the stone. For the ν in $\nu\acute{\nu}\phi\alpha\iota$, see Meisterhans, *op. cit.* p. 113, 8. The ς at the beginning of the fourth line is seen to be part of $\chi\sigma$ (for ξ), and not of $\nu\acute{\nu}\mu\phi\alpha\iota\varsigma$, as had been thought.

17. On the reverse side of the stone last described. (*C.I.A.* I, 425.)



Ἀρχέδαμος ὁ Θερ-
αῖος κᾶπον νύ-
μφαις ἐφύτευσεν

The fragment bearing the letters $\Theta\epsilon\rho$ was broken off and carried to Athens after the stone was first read. Following a

suggestion of Milehhofer (*Karten v. Attika*, Text, Heft III-VI, p. 17, "einen Rest davon vermuthlich bildet das in dem Besitz der archäol. Gesellschaft gelangte Fragment mit den Buchstaben ΘΕΡΑΐος Invent. no. 304"), this piece has recently been found — since the accompanying photograph was made — and fitted to its original place as reproduced on the facsimile.

18. In the living rock near the edge of the first landing (p. 265). The left end is broken away. Length of inscription, about 0.70 m. Height of letters, 0.055 m. to 0.105 m. (*C.I.A.* I, 426.)

| | |
|----------|--------------|
| Ι+ΕΔΑΜΟΣ | [A]ρχέδαμος |
| ΟΘΕΡΑΙΟΣ | [h]ο Θεραΐος |

19. In the living rock over the left hand of the "Archedemus relief" (p. 272). Length of upper line, 0.58 m. Height of letters, 0.055 m. to 0.105 m. (*C.I.A.* I, 427.)

| | |
|-----------|------------|
| ΑΡΧΕΔΗΜΟΣ | 'Αρχέδημος |
| Δ+ΕΔΗΜΟΣ | 'Αρχέδημος |

20. In the perpendicular surface of the living rock, upon a depressed area smoothed for the purpose (p. 265). Length of inscription, 0.63 m.; height, 0.31 m. Height of letters, 0.040 m. to 0.055 m. (*C.I.A.* I, 423.)

| | |
|-------------|----------------|
| ΑΡΧΕΔΗΜΟΣ | 'Αρχέδημος |
| ΗΡΑΙΟΣ | ὁ νυμφ- |
| ΟΛΗΓΤΟΣ | φραδ- |
| ΑΙΣΙΝΥΜΦΟΝΤ | αἰσι νυμφῶν τ- |
| ΑΝΤΡΟΝΕΞΗΡΓ | ἄντρον ἐξηργ- |
| Α-ΑΤΟ | ἄξατο |

στοιχῆδόν. There is no sign for the rough breathing. Η is used for η, but Ο for ω. The ξ in the last line is certain. The second half of the inscription is unmistakably metrical (Kaibel, *Epig. Gr.* 762; Allen, "On Greek Versification in Inscriptions," *Papers of the American School of Classical Studies at Athens*, IV [1885-86], p. 169, cf. 65, 125), and it seems possible that

the first half is an attempt at versification (so Wordsworth, *Athens and Attica*, p. 199, who calls it choriambic), the scheme being somewhat as follows:

_ υ | ~ υ | _ || ~ υ | _ υ | _ >
υ | _ υ | _ > | _ υ | _ > | _ υ | _ Λ.

Lyric metres, however, are rare in inscriptions (Allen, *op. cit.*).

Little, if any, new material has been added by the excavation to help in dating, either relatively or absolutely, these five inscriptions concerning Archedemus, and the question is still open to the considerable differences of opinion indicated in the *C.I.A.* The evidence from the forms of the letters is very contradictory, as will be seen most easily from the accompanying table, which is presented without analysis.

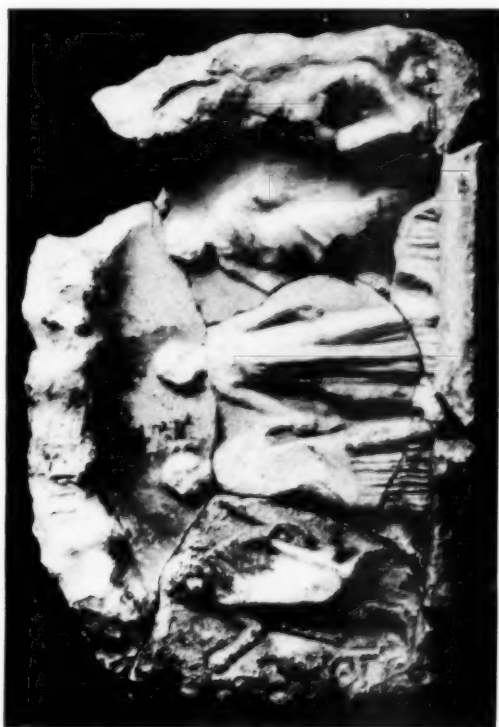
| no. | α | δ | ε | η | θ | κ | λ | μ | ν | ξ | π | ρ | ς | υ | φ | χ | ω | η |
|-----|----|----|---|---|---|---|---|---|---|----|---|---|----|---|---|---|---|----------------|
| 16 | AA | ΔΔ | E | E | Θ | K | L | M | Μ | +Σ | - | R | ςς | V | Φ | + | Ο | H |
| 17 | A | Δ | E | E | Θ | K | - | Μ | Ν | - | Π | R | ς | V | Φ | + | - | H |
| 18 | A | Δ | E | E | Θ | - | - | Μ | - | - | - | P | ς | - | - | + | - | H ² |
| 19 | A | Δ | E | H | - | - | - | Μ | η | - | - | P | P | ς | - | - | + | - |
| 20 | A | Δ | E | H | Θ | - | Λ | Μ | Ν | Ξ | Π | P | ς | Σ | Υ | Φ | Χ | Ο |

There are corresponding inconsistencies in the employment of Dorisms: No. 16 has 'Αρχέδαμος (probably) and *νύνφαι*, but *τῆι*; No. 17 has 'Αρχέδαμος and *κᾶπον*; No. 18 has 'Αρχέδαμος; No. 19 has 'Αρχέδημος; No. 20 has 'Αρχέδημος and *νυμφὼν*, but *ἐξηργάξατο*.

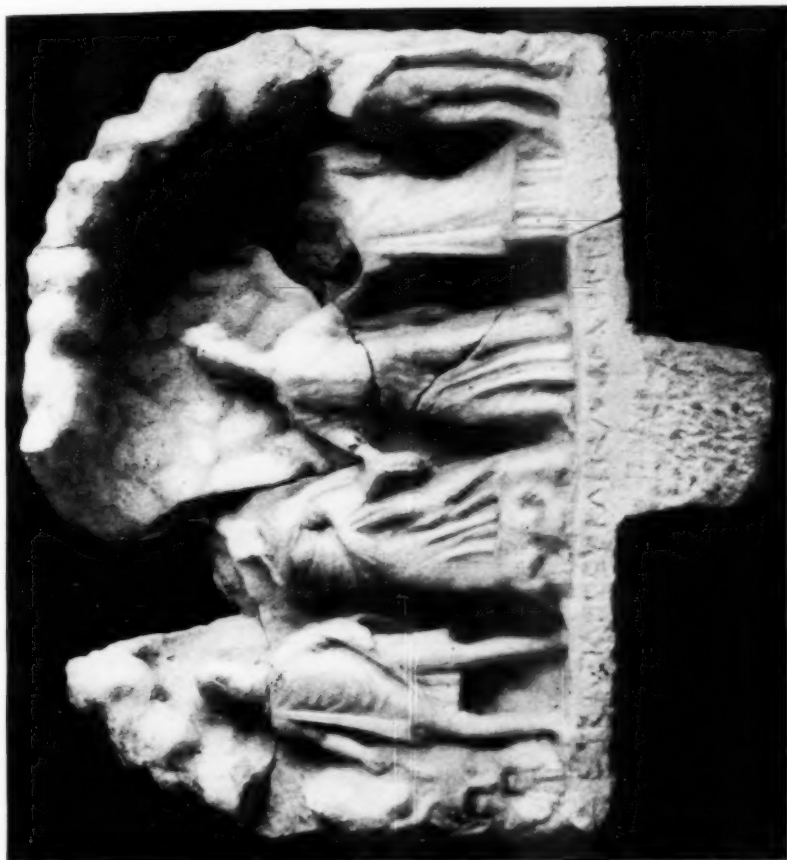
It may be, then, that considerable time elapsed between the various inscriptions, and especially before the latest—which is pretty surely No. 20; it is, however, possible that they all were cut by one man, whose foreign birth (*Θηραῖος*)—and, perhaps, archaizing proclivity—caused the confusion of dialectal and literal forms which is met even in the same inscription, but the material in hand is too contradictory to allow a positive decision as to which alternative is correct.

MAURICE EDWARDS DUNHAM.

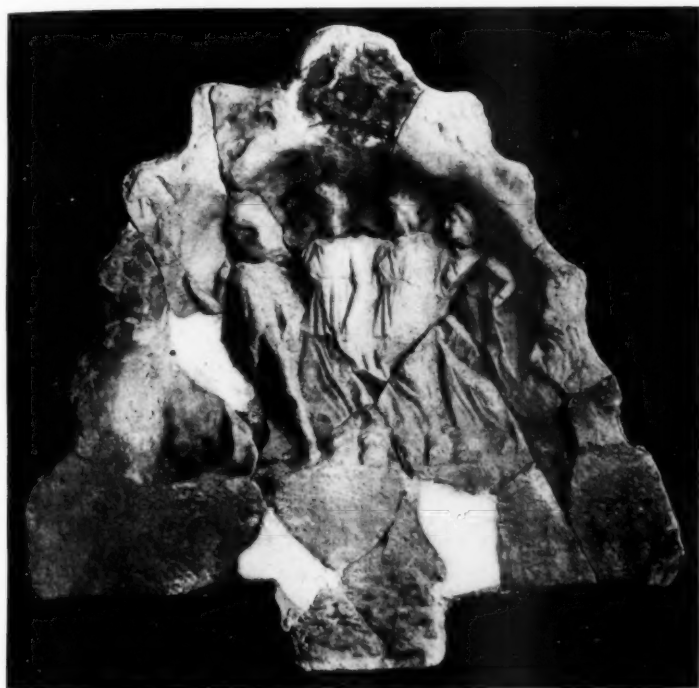
EDGARTOWN.



THE CAVE AT VARI: MARBLE RELIEF I



THE CAVE AT VARI: MARBLE RELIEF II



THE CAVE AT VARI: MARBLE RELIEF III



THE CAVE AT VARI: MARBLE RELIEF IV



THE CAVE AT VARI: MARBLE RELIEF V



THE CAVE AT VARI: MARBLE RELIEF VI



THE CAVE AT VARI: MARBLE RELIEF VII

THE CAVE AT VARI

III

MARBLE RELIEFS

[PLATES III-IX]

ALTHOUGH the cave at Vari has long been known as sacred to Pan, the Nymphs, and Apollo,¹ no one had anticipated the good fortune which befell us of discovering fifty marble fragments which fit together into five nearly complete reliefs with parts of two others, and which belong to the familiar class of votive reliefs, representing Hermes, the Nymphs, and Pan. Pottier's list, published in 1881,² which included all the reliefs of this class known up to that date, is supplemented by Roscher's *Lexikon*,³ so that there are about thirty reliefs, including fragments, which can positively be identified as parts of such votive offerings. The fact that these, as a rule, have come to light one by one in Athens, Eleusis, Megara, Peloponnesus, the Aegean islands, etc., makes it all the more interesting that so many were found together at Vari.

In accordance with the Greek spirit, which preferred types to portraits, no exact representation of this cave was attempted. In each relief the cave with its rocky border is depicted, but in widely differing shapes. It is interesting, however, to notice that the conventional border (cornice or gable) which is found on some reliefs is not seen here. The cave represented in the

¹ See pp. 287 f., above, and *C.I.A.* 423-431.

² *Bull. Corr. Hell.* V (1881), pp. 349 ff.

³ *s.vv.* 'Nymphen,' 'Pan.'

relief numbered V, with its deep overhang and pointed rocks, resembles the stalactite cave of Vari more closely than the other reliefs do, but this is due to the general style of that relief, which combines picturesqueness with careful working of details.

It is very noticeable that in many of the reliefs, otherwise practically intact, the heads alone are missing. Moreover, their destruction is manifestly not due to natural causes, but they seem to have been deliberately broken off by means of some instrument, probably during the Christian occupancy of the cave (see above, p. 285). Unfortunately, the efforts to destroy the heads were most successful, for no trace of those broken has been found.

The two points chiefly to be noted in a brief study of these reliefs are, first, their superiority in point of style to most of the reliefs of this class, and second, the appearance of a figure unfamiliar on such reliefs; namely, the young god Pan.¹

A catalogue of the reliefs follows:

I (PLATE III).— Nearly complete relief composed of six fragments; height, 0.30 m.; width, 0.42 m.; highest relief of the figures, 0.025 m.; greatest depth of the cave, 0.035 m. Material, probably Pentelic marble of fine texture, badly encrusted at the left end of the relief. The upper part and sides are slightly curved to represent the shape of the roof of the cave, and are worked into irregular depressions to resemble the rough rocks.² In the top of the relief is a small hole for the insertion of a pin, probably to hold the relief firmly in place in its niche in the rock. (For the inscription, see p. 289.)

There are five figures in the composition. Pan, who is usually a subordinate figure, is here as large as Hermes and the Nymphs. Hermes and the Nymphs hold hands, and are moving from right

¹ He appears on a relief from Megara, Furtwängler, *Samml. Sab.* pl. xxvii.

² Compare Furtwängler, *Samml. Sab.* pls. xxvii and xxviii; Pottier, *l.c.* nos. 2, 3, 4, 6, 8, 9, 11, 12, 15, 16, and *Bull. Corr. Hell.* V (1881), pl. vii.; Vienna Hof. Mus. no. 86. Cave with cornice above in Pottier, *l.c.* no. 1 (*Athen. Mitth.* V (1880), pl. vii), Berlin, 709 a; and an unnumbered relief in a side room of the National Museum, Athens.

to left, as is the case in all of our reliefs where the figures are in motion.¹ Hermes is clad in a short chiton and a chlamys.² It is impossible to tell whether he wore anything on his head.³ The right forearm, disproportionately long, is awkwardly bent, the fist being clenched as though holding something. No trace of any attribute remains; it is, however, probable that he held the *kerykeion*.⁴ He leads the Nymphs in a sedate walk.⁵

The first nymph wears a long garment reaching to the ground, and a chlamys thrown about the upper part of the body.⁶ In the chiton the folds are straight but not deep, and the skirt is a plane surface with several little parallel grooves, but with no rounded modelling. The hair is drawn back in a knot without ornaments or fillets.⁷ The face is young and girlish, with an upturned nose. The next figure is dressed in a single garment reaching from neck to feet, and held in by a high girdle. The form shows through the garment, and the arrangement of the folds is clumsy and unnatural. The hair is arranged with a soft roll around the head.⁸ The third nymph, whose left arm rests

¹ It was the usual direction, with two exceptions, Pottier, *l.c.* nos. 9 and 12. See also Furtwängler, *op. cit.* I, p. 40, description of pl. xxviii.

² The two-garment costume is usual for Hermes, although in our reliefs III, IV, and V he wears only a chlamys. Compare Pottier, *l.c.* nos. 3, 8; Berlin Museum, 709 a; Athens relief (see above, p. 302, note 2).

³ Generally he is bareheaded, although he wears a *petasos* slung at the back of his head in Berlin Museum 709 a; a fillet in Pottier, *l.c.* no. 8 and *Samml. Sab.* pl. xxviii; and a pointed cap in Vari V.

⁴ Compare Pottier, *l.c.* nos. 8 and 9. His arm is similarly bent in *Samml. Sab.* pl. xxviii; Pottier, *l.c.* nos. 3, 8, 9, 15, 16; Vari V and VI. In the cases where the *kerykeion* is not sculptured, it may have been painted on the background.

⁵ In general, the dance of the Nymphs is not spirited; with the exception of Pottier, *l.c.* nos. 9 and 12, it is little more than a slow procession.

⁶ The Nymphs usually wear two garments, although occasionally they appear in only a long chiton usually of the *diptoidion* type. Compare Pottier, *l.c.* nos. 2, 6; Vari I, III, V, VI.

⁷ Compare Pottier, *l.c.* nos. 5, 11, and *Bull. Corr. Hell.* V (1881), pl. vii; but this is not the most usual style.

⁸ This is the most common style not only in reliefs of this kind, for example Pottier, *l.c.* no. 1 (where the hair is parted); Hermes in Pottier, *l.c.* nos. 2, 5, etc.; but also in the Attic grave stelae of the fourth century, in which examples are very numerous. Among them are National Museum at Athens, nos. 743, 819, 820, 870, etc.

on her hip, has the dress of the first together with the coiffure of the second.

In the lower right corner on the rocks sits Pan, full front, playing the syrinx. As is usual in these reliefs he is bearded, and has goat's-legs.

At the lower left corner is a profile head of Acheloös, the river god, father of the Nymphs, who is so constant a figure in such reliefs.¹ The head is very roughly done, and is little more than scratched on the stone. This relief resembles in composition Nos. 1445-48 in the National Museum at Athens, as do Vari II and III, but this has no altar.²

II (PLATE IV).—Relief of five fragments. The heads of three figures and the faces of two more are lacking. Height, 0.385 m. (without the bottom projection); width, 0.505 m.; height of relief of figures, 0.04 m.; cave depth, 0.035 m. Material, Pentelic marble. The shape is similar to Vari I, but in addition it has a projection 0.11 m. \times 0.09 m. \times 0.09 m. at the bottom to fit into a hole cut to receive it in the rock.³ The rocky character

¹ On the complete reliefs, so far as I know, he is lacking only in Pottier, *l.c.* nos. 1, 9, 12 (in which Hermes also does not appear). His head is used with a lion's head as a water-spout in a well-house on a red-figured hydria from Vulci (*Bullettino dell' Istituto*, 1883, p. 166). On the reliefs he is generally in profile, but sometimes three-quarters, compare Pottier, *l.c.* no. 14; or facing, compare *Samml. Sab.* pl. xxvii; Pottier, *l.c.* no. 4; Athens, *Nat. Mus.*, unpublished relief; Vari II. There seems to be no preference as to whether he looks toward the procession or away from it. In all of our reliefs he is an elderly bearded man; cf. Berlin Museum, 709, 710, 711, 693; Pottier, *l.c.* nos. 2, 7, 10, 11, 16. He is a draped standing figure of a bearded man with small horns in 'Εφην. 'Αρχ. 1893, pl. x. On the reliefs he is beardless in Pottier, *l.c.* no. 8; beardless also at a later date on the coins of Leucas (250-167 B.C.), which are an adaptation of the head of young Alexander. The type of man's head and bull's body becomes the common one on coins of Lower Italy and Sicily, and we should perhaps imagine all our heads as belonging to such bodies. The only relief on which the body is represented other than that of a bull, is the one above mentioned, 'Εφην. 'Αρχ. *l.c.* A few bronzes repeat the familiar elderly type with ox's horns and ears. (Babelon et Blanchet, *Catalogue des Bronzes Antiques de la Bibliothèque Nationale*, p. 35, nos. 73-78, and no. 1448.)

² Compare Pottier, *l.c.* nos. 12, 16; Berlin Museum, 709 a. For the inscriptions on the reliefs, see pp. 289 ff.

³ Compare Vari III, IV; Pottier, *l.c.* nos. 1, 9, 16; *Samml. Sab.* pls. xxvii (now entirely broken off) and xxviii.

of the setting is shown not only by the working of the border, but also by the background with its irregular depressions.¹

Hermes stands full-faced, instead of in the customary profile position.² He is muscular, energetic, and stocky, thus differing from the usual slender Hermes.³ His right hand rests on the horn of Acheloös. The first nymph strides forward in an energetic fashion, with the drapery drawn in horizontal folds across the upper part of the body and streaming out behind. The second nymph wears her chlamys thrown back like a shawl, and the long chiton has a high girdle.⁴ She is nearly *en face*, and holds with her right hand the flying end of the drapery of the first nymph. Her hair is elaborately arranged, with waves and a high knot. Of the third nymph merely the part below the waist is preserved. The shallow treatment of the folds of her long chiton showing beneath her cloak recalls the preceding relief.

Behind her, with his back to the rocks, stands an ithyphallic Pan,⁵ turned three-quarters toward the front. He has shaggy goat's-legs, and plays the syrinx. A short chlamys falls from his shoulders,⁶ but the drapery is very stiff. Pan seldom appears standing in the central group.⁷

At the lower left corner is the head of Acheloös, a bearded old man with heavy brows, ox's ears, and large branching horns.⁸ The ugliness of his face may perhaps be attributed to

¹ Compare *Samml. Sab.* pl. xxviii and Vari VII. the only other examples.

² Compare Hermes in Pottier, *l.c.* nos. 9, 15.

³ He recalls Hermes in Pottier, *l.c.* no. 2, in costume and in figure.

⁴ Compare the second figure in Vari I.

⁵ He is rarely standing in any of these reliefs, but see Pottier, *l.c.* no. 16, and *Bull. Corr. Hell.* V (1881), pl. vii.

⁶ This is unusual, but compare Pottier, *l.c.* nos. 6, 16, where Pan wears a short cloak clasped in front and falling open; different from the Pan of pillar-type with mantle draped about him (see Roscher, *Lexikon*, s.v. 'Pan'). A chlamys is worn by Pan in a Göttingen relief (Hubo. *Catalogue*, v. 43, no. 255).

⁷ Compare *Bull. Corr. Hell.* V (1881), pl. vii. In Pottier, *l.c.* no. 16, a small Pan in the central group plays the pipes; cf. also an unnumbered relief in a side room of the National Museum at Athens.

⁸ This is the only one of our reliefs where his animal characteristics are at all prominent. For branching horns compare Pottier, *l.c.* nos. 4, 7, 14, 16, Berlin Museum, 709 a; for ox's ears, compare *Samml. Sab.* pl. xxvii; *Bull. Corr. Hell.* V (1881), pl. vii; and later (second or first century B.C.) in a mask of Acheloös in

the difficulty of foreshortening. In front of the first nymph is a low, rock-hewn altar.¹ (For the inscription, see pp. 289 f.)

III (PLATE V). — Relief composed of fourteen fragments. Height, including tenon, 0.68 m.; width, 0.70 m.; height of relief, 0.06 m. Material, grayish marble, probably Hymettian. The triangular shape is not paralleled in any other relief. The method of representing the rocks is conventional; there is no overhang, and the shelving in the cave is gradual. The procession moves from right to left. Hermes wears only a chlamys. The three Nymphs hold hands, and are dressed in sleeveless chitons with *diploidia*. The folds of the garments are shallow and sketchy, particularly in the skirt. The only extant face has a long, sharp nose, a firm mouth, and deep-set eyes. The hair of all three is dressed in the usual fashion.

Below, at the right, is the face of Acheloös, broken from the mouth down. The face is benevolent, with delicate nose and deep-set eyes. His small straight horns show slightly.²

Above in the centre sits Pan, full-face, with his legs and arms drawn up and foreshortened. As usual, he plays the syrinx.³ His hair is long, and two straight horns show plainly.⁴

the terra-cotta relief from Myrina representing a cave dance (see *Bull. Corr. Hell.* VII (1883), pl. xvi, pp. 496 ff.). He has the body of an ox in Pottier, *l.c.* no. 14; Berlin Museum, 709 a. He is a bearded old man, with horns and ox's ears, on coins of Metapontum (480-400 B.C.), Acarnania (400-350 B.C.), Leucas (300-250 B.C.), Thyrrheium (250-229 B.C.), Stratus (450-400 B.C.), Ambracia, etc.; on vases of black-figured style generally has bearded head with horns and a bull's body. (See *Arch. Zeitung*, XLIII (1885), pp. 106 ff. for list.) On one vase he has one horn; *British Museum Catalogue*, vol. II, B, 228.

¹ Rock-hewn altars in Pottier, *l.c.* nos. 2, 7.

² Compare Vari VI, *Samml. Sab.* pl. xxvii; *Bull. Corr. Hell.* V (1881), pl. vii.

³ The exceptions are Pottier, *l.c.* nos. 1, 6 (in both of which he holds the syrinx); Vari VI and VII; and Göttingen, where we have a tendency toward the type of Pan, the hunter, rather than the usual Pan, the musician. The syrinx is the earlier rectangular shape with reeds of equal length; the use of reeds of unequal length begins in Graeco-Roman time (see Furtwängler, 'Cista Praenestina e Teca di Specchio-con Rappresentazioni Bacchiche,' *Annali dell' Istituto*, XLIX (1877), p. 212). This is the first of our reliefs in which Pan holds a subordinate position, although, with the exception of *Bull. Corr. Hell.* V (1881), pl. vii; Berlin Museum, 709; Pottier, *l.c.* nos. 12, 15, 16; and the unpublished Athens relief, such is his customary place.

⁴ The horns are usually well separated and straight.

Around the border are several goats' heads in very low relief.¹ A low altar of large, round cobblestones is in the front part of the cave in the centre.² (For the inscription, see p. 290.)

IV (PLATE VI).—Relief composed of five fragments; only the lower part remains. Height, 0.32 m.; width, 0.58 m.; height of relief, 0.06 m. (high but not round). Material, grayish marble of coarse grain. This type is much less frequent than that of the dancing or walking Nymphs. Hermes, who is nude, except for a long chlamys, draped over his left shoulder and arm, and falling in flat, shallow folds below his knees, stands in an easy attitude with the weight resting on his right leg, while the left is slightly bent.³ The right hand held some object now broken away. Enough remains to show that it could not have been a slender object like his herald's staff; possibly it was a vase.⁴

The nymph nearest Hermes is taking a vigorous stride, her himation has slipped below the waist, and is grasped by her left hand, which is large in proportion to the body. Although the folds are shallow, one can see the difference in texture between the heavy chlamys and the thinner chiton. The next nymph stands with her weight on her right leg, while the left one is crossed in front. The third nymph is the first seated figure on our reliefs. The right hand rests in her lap, and the left was raised, holding her cloak.⁵ (For the inscription, see p. 291.)

V (PLATE VII).—Relief composed of five fragments. Height, 0.52 m.; width, 0.355 m.; height of relief, 0.05 m.; cave depth, 0.04 m.; undercutting, 0.015–0.02 m. Material, fine-grained Pentelic marble. The cave rocks overhang and are deeply undercut. (For the inscription, see p. 291.)

¹ Compare Pottier, *l.c.* nos. 2, 16; Vari III, VI. Sheep's heads on *Samml. Sab.* pl. xxviii. Dogs' heads, Berlin Museum, 712.

² Compare Pottier, *l.c.* nos. 1, 6, 8; *Samml. Sab.* pl. xxvii.

³ No similar Hermes has been found on any of these reliefs. It is, however, like many statues of Hermes, notably the Hermes of Andros, belonging to the fourth century B.C. Ours is a little more erect; the Hermes of Andros has not his hand on his hip. The position of the legs is almost identical.

⁴ The hand turns over, with the fingers drooping, thereby showing that the object was not grasped in the fist.

⁵ She resembles one in Vari V.

A group of three female figures (two of whom stand while one is seated) looks toward the right at Hermes, who leans against the background of the cave. He wears a chlamys, fastened under his chin and thrown back from his shoulders, and a *pilos*. Hermes, the traveller, is meant to be represented.

He evidently held in his hands something upon which the gaze of all the Nymphs is bent, but what it was must be a mere conjecture. Two reasons point to the improbability of its being his most obvious attribute, the *kerykeion*. In the first place it is too often in his hands to excite attention; moreover, the position of the arms shows that it would have projected beyond the limits of the relief. Possibly he held some offering which he, as messenger, was bringing to the Nymphs. The seated figure rests on a low, rock-hewn seat, in an easy, graceful attitude, bending forward a little. Her feet (on which there is no indication of toes or of sandals) rest firmly on the ground, the left one drawn back slightly. Her right arm, which is delicately modelled, lies on her knee, the left arm (inferior in execution) is bent, and the elbow rests on her left knee, the fingers of her hand being outspread. The thin, light chiton with short sleeves is pulled loosely through her girdle, and is seen below the himation, which has slipped down to her waist.

Behind her stand two more Nymphs, one of whom has her arm about the shoulders of the other.¹ The first nymph is concealed as far as the breast by the seated figure. She wears a thin chiton, which leaves the shoulders exposed. The left arm touches her own neck; the right hand rests on the shoulders of the seated nymph. Her hair is done in a net or bag in a style familiar to us from the "Tanagra" figurines.² The other nymph has a thin chiton with shallow folds. Her hair is curly and arranged in a roll.

¹ Compare Pottier, *l.c.* no. 1.

² Compare Pottier, *l.c.* nos. 2, 7 (more pointed and fitting more closely around the face). Caps are worn by servants on the Attic grave stelae. Nos. 718, 723, 732, 743, 822, 832, etc., in the National Museum at Athens are something like this, but the caps are closer fitting and less graceful.

Above, in the rocks, Pan reclines. He faces forward and plays the syrinx. His face is coarse, with a flat nose and long hair. The relief here is lower than in the cave. On the rocks several goats are roughly scratched. One of these has his head turned back, another is grazing, while a third, with uplifted head, is eating leaves from an overhanging tree or bush as he climbs up the rocks.

It is probable that an Acheloös was on the corner of the relief which is now broken away.

VI (PLATE VIII).—Relief in ten fragments. Height, 0.46 m.; width, 0.69 m.; height of relief, 0.08 m.; cave depth, 0.06 m. Material, Pentelic marble. (For inscription, see p. 291.)

Although the relief is rectangular in shape,¹ the cave outline is indicated. The shelving is gradual, with no overhang, while a slight waviness shows the rock outline. The figures are too large for the cave.² Here there is no Hermes,³ but a group of three Nymphs, one of whom stands in the centre, while the other two are seated, one on either side, looking toward the middle. The figure at the left is on a high seat with her feet planted firmly on the ground, the right slightly drawn back, and the left advanced. She is of massive proportions for a nymph, more so than either of the others in the relief. She wears a chiton with a high girdle, while an himation falls to the ground, concealing her feet. The left hand holds a corner of her cloak; the right arm lies across her lap. Her hair is elaborately waved and arranged in a high knot. The nymph in the middle stands in an easy pose, with the weight on the right leg and the left bent at the knee.⁴ Her right arm rests against the rock, at the level of her shoulder. The upper part of her chiton is almost transparent; at the foot the folds are deep and stiff, as if dug out with a chisel, giving a column-like effect. Her cloak is draped over the left arm and hand, and falls around

¹ Compare Pottier, *l.c.* no. 2.

² Compare Vari III.

³ Compare (among complete reliefs) Pottier, *l.c.* nos. 4 (upper part), 12; Myrina terra-cotta, *Bull. Corr. Hell.* VII (1883), p. 498, pl. xvi.

⁴ Compare Hermes in Vari VI, where, however, he turns in the opposite direction.

the lower part of the body in well-executed folds. From traces on the background it is seen that the head was *en face*, or turned to the seated figure already described. The other seated figure turns three-quarters toward the centre. Both arms are gone, but on the rocks the fingers of her left hand remain, showing that the left arm partly supported her weight. Her cloak is massed across her lap, and falls in ample folds at her left side.

On the upper left corner, on the rocks, reclines Pan. His goat's-legs are crossed, the right arm extends across his body and holds a *lagobolon*.¹ Contrary to custom, he is not playing his syrinx, but he holds it in his other hand.

On the opposite corner a young male figure, profile, in very low relief, climbs up the rocks. He wears a *pilos* and a short chlamys over his back, and he carries a crooked stick. He is a hunter, and with his dogs pursues his prey.

In the lower left corner is the head of Acheloös. Small horns are visible; otherwise the face is a noble type of the elderly man in the usual fourth century style.

VII (PLATE IX). — Two fragments of coarse grayish marble; height of relief, 0.04 m. There are cave rocks above, and a rocky background is slightly indicated.² The young Pan reclines on the rocks, over which he has thrown a cloak or the hide of some animal. The head is almost full face, the body three-quarters, the legs profile. The right leg is drawn up at a sharp angle. The god's right arm lies along his thigh, and the hand, which holds his *lagobolon*, rests on his knee. His left arm lies on the rock and holds the syrinx. The hair is thick and wavy, and the beginnings of small horns are clearly indicated on the brow. The face is like that of the young satyrs, the eyes rather close together with a decided ridge above them.

The catalogue shows that some of our reliefs reproduce types already familiar, while others exhibit interesting variations. Pottier divides the reliefs into two general classes,

¹ The only one on reliefs except Vari VII.

² See above, p. 302, note 2.

those in which Hermes leads the dancing or walking nymphs,¹ and those in which the nymphs are quiet or posed.² In only one of these³ do any of the nymphs appear seated. We find among ours both classes, and an interesting transition from one to the other. The reliefs I, II, III, belong to the former class; in IV there is the substitution of standing figures for the customary procession, and the introduction of a seated figure. The figures, however, are merely arranged in a line like the procession figures. In V a real group is found in place of the scattered figures. The Archander relief⁴ has the figures more or less grouped, and is the only one resembling ours to any extent. In VI the group is still retained, but the figure of Hermes is lacking. This is unusual, but not unprecedented.⁵ Of the small relief VII, too little remains to determine the composition, but it introduces for the first time on these reliefs the figure of the young Pan in a prominent position.⁶

The careless execution of the reliefs makes it impossible to date them with any degree of accuracy. It is only safe to say that they belong, as do others of this class, to the fourth and third centuries B.C. Since they were not made by sculptors of note, but by mere artisans, we cannot apply to them the same standards of judgment that we do to important works, nor can we trace any continuous improvement from early attempts to perfected art. The archaic appearance of some of them is not due to a conscientious attempt on the part of the sculptor to express what is best in himself, but to lack of skill and to carelessness. In general, ours are better than the average reliefs of this class. None is so poor as the Parnes relief,⁷ while two of them (V and VI) are of decided merit, and another (VII) introduces an interesting innovation.

¹ *I.c.* nos. 2, 3, 6, 8, 9, 10, 11, 16, pl. vii; cf. *Samml. Sab.* pl. xxviii.

² *I.c.* nos. 1, 4, 7.

³ No. 7.

⁴ Pottier, *I.c.* no. 1.

⁵ Pottier, *I.c.* no. 12, pl. vii.

⁶ Young Pan is seen on a relief from Megara, *Samml. Sab.* pl. xxvii, but this relief has not the usual dancing nymphs. Pan sits in a circle of serious gods. The head and bust of young Pan are also on a fragmentary Cybele-relief from Tanagra (*Arch. Zeit.* XXXVIII (1880), p. 187, pl. 18).

⁷ Pottier, *I.c.* no. 2.

A brief discussion of each follows:

I. — This relief is better in conception than in execution. The folds of the drapery are formal and archaic, the foreshortening of Pan is clumsy, but the procession is not so stiff as is usually the case, and some attempt has been made to express individuality in the faces.

II. — The care in representing the rocky cave, the attempt to vary the composition by alternating figures *en face* with profile ones, and the introduction of different costumes are an advance on the previous relief. The details, such as the shaggy goat's-legs of Pan, are carefully worked out. In the drapery the treatment is more ambitious than in the preceding relief, with its few straight lines and channelings, but even here it is not true to nature. In the lower part the oblique folds appropriate to the profile figure in motion are duplicated on the facing figure, giving an awkward appearance between the knees and feet.

III. — The third relief is very careless in execution. The figures are too large for the cave, and their heads seem almost to support its roof. The modelling of the nude parts is very faulty, the arms being made up of a series of planes with no transitions, while the drapery is shallow and sketchy. The head of Achelōs is of a merit quite out of keeping with the rest of the relief. Evidently the artist could do well enough if he were willing to take the trouble.

IV. — Of this only one figure is of interest, that of Hermes. Here the modelling, particularly about the legs, is good. The easy attitude, with the so-called "double curve" of Praxiteles, makes us date the relief no earlier than the latter part of the fourth century B.C., although it may be later.

V. — This shows a decided advance over others of the class, both in conception—the arrangement into a group—and in the execution of details. It is more like the Attic grave stelae of the fourth century than it is like votive reliefs of its own class.¹

¹ The attitude of the first standing nymph, with the body three-quarters and the down-turned face, recalls the figure of a man with his hand resting on his

There is, however, no question as to its character, as the cave, Pan, and the goats around the border, and the inscription (*νύμφαις*), all show. Aside from the charm and grace of the composition as a whole, the execution both of the nude parts and of the drapery calls for special mention. The body of Hermes is done with care and skill, particularly the thighs, which are well rounded yet firm. The arms of the women are rendered with great delicacy, the flat treatment being entirely abandoned; the whole rounded surface is worked with care, and the marble is smoothly polished. Behind the arm of the standing figure, where the undercutting is deepest, there are three or four small drill-holes, and behind her forehead are two similar ones. Her face stands out from the background, but is not well finished on the inner side. This and the adjoining heads are the best preserved on the Vari reliefs; they are of the usual later Attic type, with sweet, thoughtful expression. Technically, they show the result of no little thought and carefulness; they are treated with feeling, particularly in the transitions from nose to cheek and in the curves of the cheek. The rendering of the drapery is not less successful. In place of the conventional parallel grooves running vertically or diagonally on the figure, we have drapery which shows the living form beneath. Its arrangement about the lower part of the seated figure, rather tightly drawn, with a little triangular effect between the leg and the rock seat, again recalls the grave stelae,¹ in which, however, the drapery is usually less transparent.

VI.—The work is excellent in several respects, particularly in the variety of the drapery. The heavy and thin materials are true to nature, and the masses of folds in the cloak of the

chin and the same pensive gaze in the National Museum at Athens, no. 717. The standing figure behind a seated one is a frequent motive (National Museum at Athens, nos. 717, 719, 723 [servant], 729, 737, 743, 819, 822, 830, 832, 870, etc.), but a group of three has not been found.

¹ National Museum at Athens, nos. 719, 743, 764, 831, 908. It is also very like the figure of Apollo in the Mantinean reliefs (cf. Fougères, *Bull. Corr. Hell.* XII [1888], pls. i-iii) in the triangular effect of the drapery, although in the Vari figure the drapery is wrapped closely around the leg.

seated figure at the right form an excellent contrast to the drapery of the standing figure. The arms are well modelled. A technical fault is the stiffness and rigidity of the seated figure at the left (in striking contrast to the easy pose of the seated figure in V). The foot farthest from us is advanced slightly.¹ The method of representing the hands is quite incorrect. The fingers on the rock are unnatural, and the raised right hand resting on the background is too round; it is in fact absolutely wrong between the thumb and forefinger. Instead of making a U-shaped curve, the flesh rises into a little mound. The figures are too large for the cave,² probably because the artist was copying a relief of another sort. This supposition is based on two facts. First, such an elementary mistake would hardly have been made by an artist who did such good work as this relief. Second, the type of maiden differs from those on other cave reliefs. It is heavy and massive, not slight and graceful. The artist has evidently taken the type of some group familiar to him, adding in low relief around the border the usual elements of the reliefs in which the nymph occurs.

A hasty comparison with the Mantinean reliefs³ is almost forced upon us by the consideration that it is the best of the fourth century reliefs in which there are groups of three figures. In each case⁴ there is a standing figure in the middle, around which the interest groups itself. This is unusual in the fourth century. There are also similarities in separate figures, as, for example, in the seated figure to the left, and in the Apollo we find the position of the feet reversed, but the arm rests across the lap in much the same way, and the manner in which the folds of the upper drapery fall to the lap and are grasped by the right hand is almost identical. The left hand of Apollo is raised to hold his lyre, while in this relief the raised left hand, though having no lyre, holds an end of her himation. The position of the standing figure is almost the same as one of those from Man-

¹ Compare National Museum at Athens, nos. 717, 832, 968.

² Compare III.

³ Fougères, *l.c.*

⁴ Each of the three Mantineaean slabs and Vari VI.

tinea,¹ the knee being slightly more bent. The drapery over the knee, running diagonally across the body from the right foot to the left hem, is met by a fold from the right hip in exactly the same way in both reliefs. The representation of the part of the garment below the chiton is in both cases by means of parallel grooves alternately deep and shallow, though in the Vari relief the grooves are cut somewhat deeper. The differences between the two lie chiefly in details. For example, the Mantinean figures are more fully draped; all have their himatia wrapped closely about them, but all show more of the long undergarment below the bottom of the cloak than does this relief. No Mantinean figure has the arm raised as in this, although one extends her arm, holding out a lyre. In conclusion, it seems as if the sculptor of this relief must have been familiar with the reliefs from Mantinea,² but was forced by the shape of the cave to introduce two seated figures at the sides, thus not borrowing exactly from the original.

VII. — The interest of this relief rests upon its relation to well-known works of sculpture, and the fact that it introduces young Pan prominently on this class of reliefs. Although we cannot reconstruct the composition with certainty, this being unique, it seems probable that the young god was seated above on the rocks, watching the dance below. Pan's relation to the nymphs' dance shows several changes; at one time he leads the dance, at another he stands in the cave playing his syrinx, then he sits above in the rocks playing, and finally becomes merely a spectator, as in this case. It has been noticed that the old Pan with goat's-legs was represented on these reliefs, with one exception.³ In the last part of the fifth century a preference arose for representing young gods; Hermes and Dionysus, hitherto bearded, became youths, and the same tendency was

¹ Central figure of right slab.

² Or with others based on the Mantinean relief, although I am not familiar with any that reproduce the type. One must suppose that the sculptor of the Vari relief was familiar either with the Mantinean relief itself or with others of the same type.

³ Megara relief, *Samml. Sab.* pl. xxvii. See also above, p. 311, note 6.

true of Pan. In the case of the former two gods, the later type supplanted the earlier one, but, on the contrary, we find that the two different types of Pan (the old god, bearded, horned, and goat-legged, and the young god entirely human except for his small horns) existed side by side¹ down through Hellenistic and Graeco-Roman times, resulting in endless confusion between young Pan and the satyrs. By the time of the Megara relief above mentioned, on which the only other representation of young Pan occurs, the artist had a choice between these two types, and, in the midst of a solemn assembly of the gods, chose the human form. The bearded, half-human type was undoubtedly the older. Furtwängler,² in his discussion of the Megara relief, says that young Pan is the type which originated in the end of the fifth, and the beginning of the fourth century, in the Peloponnesus or Sicily. Its probable origin was on the coins of Messana, 431 B.C.;³ a young head with short hair and small horns on his brow. There were two ways of representing the young Pan: first, standing; second, seated. The standing type is familiar to us from many illustrations, going back to two originals. The first is the well-known bronze in the Bibliothèque Nationale,⁴ which Furtwängler⁵ says is an original from the immediate circle of Polyclitus. This is almost identical with the Doryphorus statues, except that the left arm, which carried a short *pedum* in place of a spear, is more bent, and small horns are added. The other is also from an original of Polyclitus. The motive has been borrowed inappropriately from the young victor type, and is familiar in many copies, of which the "Leyden statuette" is the best representation.⁶ Therefore we must admit that by the end of the

¹ British Museum, *Catalogue of Vases*, vol. III, pl. ix, E 228.

² *Samml. Sab.* pl. xxvii. See also 'Satyr von Pergamon,' and *Annali dell' Istituto*, XLIX (1877), pp. 184 ff., by the same author.

³ Picture in Gardner, *Types of Greek Coins*, pl. ii, 42.

⁴ Babelon-Blanchet, *Catalogue des Bronzes Antiques de la Bibliothèque Nationale*, 428 A M, III, pl. xii, or *Athen. Mitth.* III (1878), pl. xii.

⁵ *Masterpieces of Greek Sculpture*, p. 229 (English ed.). Babelon says it is a copy of the fourth century (Roscher).

⁶ Furtwängler, *Masterpieces*, p. 114, where a list of copies is given.

fifth and early fourth centuries, there was, in the Peloponnesus, a type of young Pan, standing, which originated with Polyclitus.

But we find also a seated type, familiar chiefly on coins.¹ The wide distribution of this type in later times points to a famous original. What, then, is the original of this seated type? To return to our relief which supplies the missing link — its resemblance to the so-called "Theseus" of the Parthenon is obvious. Although not identical, each is a youth in a semi-reclining position, resting on a skin or cloak spread over the rock. The right knee is drawn up, the body turned partly toward the front. The work of our relief is so inferior that it is not likely to have been an original conception, and the motive was probably borrowed from an original based on the "Theseus." At least, there is no other statue which it so closely resembles.²

On the other hand, the connection between our relief and the reclining Pan on the coins is no less apparent, even to the small horns and the attributes of club and syrinx. Its high relief is a transition between the round statue of the Parthenon and the low relief of the coins. From this type of Pan, original in Attica, the coins with the type of Pan of the same kind evidently came. Whether it was taken from an Attic type of Pan derived from the "Theseus," or from the "Theseus" itself, we cannot say, but, in any case, the original of the coin-type appears to be directly or indirectly the statue of the Parthenon.

If the origin is to be sought elsewhere, we have no existing monument which fulfils the required conditions to so admirable a degree. We have seen from the dates of the coins that they must come from a fifth-century motive. Here is the fifth-century

¹ (a) Messana (306 B.C.), Imhoof, *Monnaies Grecques*, pl. B, 5. (b) Arcadian League (370–300 B.C.), Gardner, *Types*, pl. viii, 32. (c) Megalopolis (300–251), Head, *Hist. Num.* p. 377. (d) Later coins of Delphi, Panticapaeum, Sicily, Lower Italy, etc.

² A figure on the Lysicrates monument is somewhat similar, but its late date makes it probable that it, too, was borrowed from the "Theseus," or was a copy of him.

statue at hand. Objection may be raised that the "Theseus" is not a Pan, although that interpretation of this much-discussed figure has been suggested, for he has neither the small horns nor the attributes associated with this god.¹ But in order to prove our point it is by no means necessary to admit that "Theseus" is Pan, for we have seen that the Doryphorus, who has no connection with Pan, was converted into a type of that god by the addition of small horns and a syrinx, and the substitution of a club for a spear. Neither is it necessary to admit that the coins were copied directly from the "Theseus" (although the fact that the figures on the coins all face in the same direction makes it probable that they were copied from a relief or a pediment), but it seems probable that the "Theseus" was borrowed (with necessary alterations) to form a representation of Pan, from which the coins were derived. At a later time this attitude became famous in Lysippus's well-known statuette of Heracles, described by Statius (*Silv.* IV, 6) and Martial (IX, 43, 44). This is copied on the coins of Croton,² but the Messanian and Arcadian coins antedate Lysippus, and put any such origin out of the question.

It has been said that the connection of the Arcadian coins in general with the Polyclitan school is unmistakable, particularly in the coins with only the head.³ Even this does not disprove the Attic origin of the seated Pan on Arcadian coins, for the copies need not be slavish. The Peloponnesian artists were used to certain proportions, and, while borrowing the motive and attribute, might easily retain the proportions to which they were accustomed. The head of young Pan was already a familiar conception to them, and need not be altered to Attic

¹ Sauer (*Athen. Mitth.* XVI [1891], p. 82) says that the marks on the floor of the pediment show that the left hand held a bronze attribute. Regularly Pan holds his syrinx in his left hand, and these marks are probably those of a spear. Miss Jane Harrison, who was one of the first to notice the resemblance between this relief and the "Theseus," considers it an important piece of evidence in identifying the "Theseus" as a "Young Pan."

² Illustrations in Gardner, *op. cit.* pl. v, 2 and 29.

³ Gardner, *op. cit.* pl. viii, 32, and explanatory text.

style, especially as the treatment of the hair in the bronze models of Polyclitus is better adapted for coin engraving than in the Attic marble models. While retaining their own treatment of details, the Peloponnesian die-engravers apparently took from their Attic neighbors the attitude of the young god of their Arcadian mountains. If at the time of the introduction into art of the young god Pan, the Peloponnesians preferred the standing type, using for this a famous statue by their famous master Polyclitus, why should not the Athenians have preferred a seated type modelled after the "Theseus" of Phidias? This origin is not disproved by the non-occurrence of young Pan on Attic coins or vases, for the coins of Attica were noticeably conservative, using Athena and the owl as the only decoration of the coins until a late date, while young Pan first begins to be conspicuous on the vases of the Graeco-Italian period.

Our Pan, then, is a bit of evidence which forms a link between the coins and the "Theseus," and indicates that this type was used by the people of Attica for Pan. While exceedingly careless in execution and artistically of no value, it gives us—aside from the coins—our first important representation of the seated young Pan; it shows that there must undoubtedly have been a well-known statue from which it was copied, and it points to the origin of the seated young Pan in Greek art in the so-called "Theseus" of the Parthenon.

IDA CARLETON THALLON.

POUGHKEEPSIE.

THE CAVE AT VARI

IV

VASES, TERRA-COTTA STATUETTES, BRONZES, AND MISCELLANEOUS OBJECTS

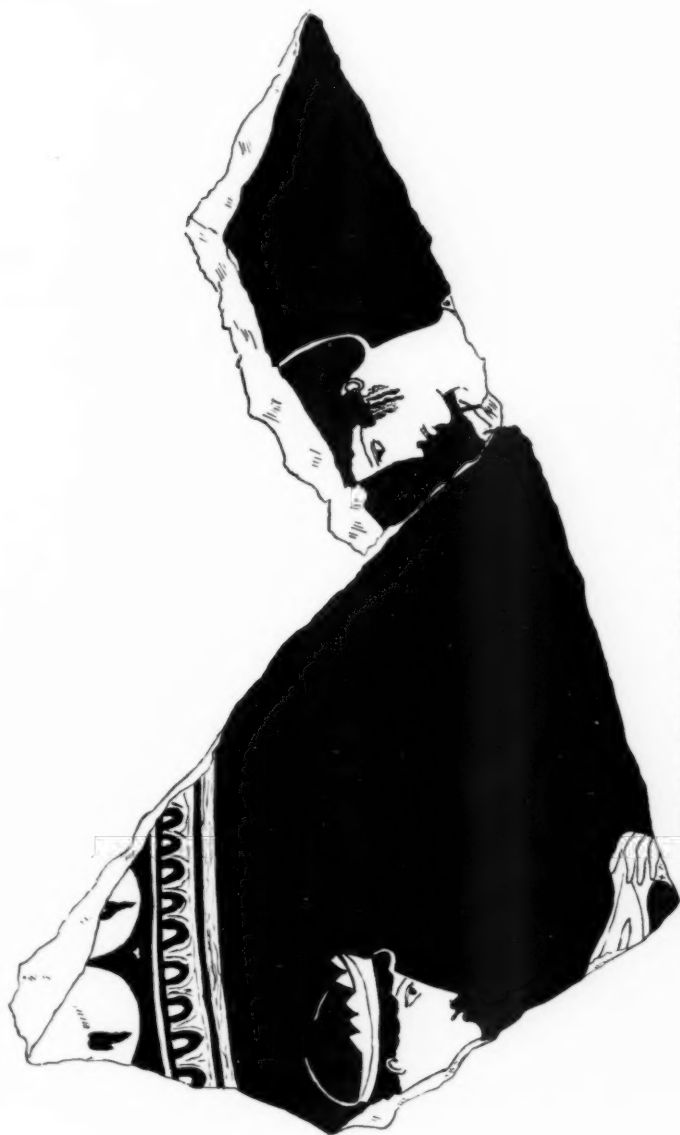
[PLATES X, XI]

THE POTTERY

THE pottery is the common Attic ware such as has been found in large quantities at Marion-Arsinoë in Cyprus. In general, it consists of a large number of flat bowls or saucers, cups and lecythi of plain black ware, and a smaller number of red-figured vases, chiefly lecythi, craters of the oxybaphon variety, and miniature lutrophori. Of the red-figured examples, none are earlier than the period when the eye is correctly drawn. The earliest vase, two fragments of which are seen in PLATE X, is dated about 460 B.C.;¹ and, as this was found at the lowest level of the Greek layer, it furnishes the earliest date of the entire vase-find.² The latest date of the vase-find is at least later than the third century, for Megara ware was found in the Greek layer at some distance below the upper

¹ The faces are similar to those on the Orvieto crater to which Milchhöfer assigns this date (*Jahrb. deut. Arch. Instit.* IX [1894], p. 75).

² It is, of course, possible that the vase was offered at a date later than that of its manufacture. However, that the earliest date cannot be later than the middle of the century is evident from the use of the three-stroke sigma in an incised vase-inscription (Fig. 2, No. 2, p. 326), the form which appears on the tribute-lists for the last time in 447 B.C. (*C.I.A.* I, 233). Moreover, at the lowest level a few black-figured fragments were found, and this ware finally disappears about 450 B.C. (Myres-Richter, *Cat. of Cyprus Museum*, p. 25).



FRAGMENTS OF A RED-FIGURED VASE FROM VARI





TERRA-COTTA FIGURINES FROM THE CAVE AT VARI

level. With this agrees the evidence of the terra-cottas which extend down into Graeco-Roman times; cf. No. 63 (p. 333).

The work on the red-figured vases, with the exception of a toilet scene on one lutrophorus, is universally careless, and the subjects depicted are those found most commonly on the inferior ware. One aryballus with Eros and Aphrodite may be mentioned. Eros is picking berries from a tree for Aphrodite, who sits before him. It differs only in details from the one published in the *Arch. Zeit.* (XXXVII [1879], pl. 6, 2); here Aphrodite leans on her right elbow, and with her left hand holds up the drapery which covers her back and the lower part of her body. Behind Eros is a second tree. Eros wears a crown. Of the colors common to this class of vases, only traces of white and yellow remain. Height, 0.072 m.

The list of vases is as follows:¹

Nos. 1-9. Black-figured fragments of careless work, chiefly lecythi with stiff, upright palmettes, and necks of miniature lutrophori.

Nos. 10-27 are fragments of large vases which are probably oxybaphons, although the trefoil mouth of a large pitcher was found. The fragments show women from toilet scenes; ephebi with strigils; a bearded man; a couch and an Eros from a banquet scene; the lower part of a scene with Eos and Cephalus, of the type found on E 320 in the British Museum; a youth with a petasus hung on his shoulders; and the central figures from a libation scene. Cf. PLATE X.

Nos. 28-142. Small aryballi and lecythi.² Of these the majority consist of the plain types, the most common being those ornamented with a line left in the red of the clay, running around the lower part of the body (*Compte Rendu*, 1863, pl. vi, 3). There are three examples each of the aryballi covered with a network of black glaze (*op. cit.* fig. 1) and of pressed ware, the latter with a band of alternating wedges filled with crowded palmettes. The lecythi, covered with pipe-clay and decorated with a conventional design in black, number only sixteen. Of the red-figured examples, the types represented are the single figure of a woman (18), a helmeted head (1), a goose (1), a woman's head with a snood (3), and a squat palmette. This last forms the largest series among the aryballi.

Nos. 143-259. Fragments of cups. The cylix is wanting, and the cantharus appears only four times, showing two forms; cf. Robinson, *Cat. of*

¹ The vases are badly broken, only three being intact, — a miniature cylix, a lamp, and a small lecythus.

² The height of the lecythi varies from 0.067 m. to 0.14 m.; of the aryballi, from 0.055 m. to 0.13 m.

Vases, Boston Museum, nos. 407, 411. Other types of cups are nos. 403 and 404 in the Boston Museum; Stephani, *Vasensamm. Ermitage*, form 12 (the latter are red, painted, in the bowl and about the standard, with concentric circles of black); Furtwängler, *Vasensamm. zu Berlin*, form 284; *Compte Rendu*, text, 1869, p. 11, no. 63. In addition there is a series of a high, narrow scyphus with slightly concave sides, and a series, in coarse ware, of a deep cup with a two-cushioned, high foot. The red tone so common on Attic plain ware found in Cyprus appears a few times.

Nos. 260-270. Bowls with a metallic lustre; as Levezow, *Galerie der Vasen, Berlin*, form 3.

Nos. 271-321. Saucers or flat bowls on a low foot. They range from a coarse, heavy ware painted with a dull wash to a fine ware with a good glaze, often with circles, sometimes hung with palmettes, impressed on the bowl. One only has an independent rim, as Lau, *Die griechischen Vasen*, pl. ix, 5. On the bowl of one is painted an athlete holding a pair of jumping-weights.

Nos. 322-345. These are gutti of the high-tubed variety, lamps with a central circular opening (Stephani, *op. cit.* form 63), and vases with spout and strainer (Furtwängler, *op. cit.* forms 247 and 249).

Nos. 346-367. Miniature vases. Of these the larger numbers are circular ointment pots (Furtwängler, *op. cit.* form 258), boxes with extruding bases, and cylixes. The latter are plain, sometimes with incurving handles, or have a band of pipe-clay about the mouth, painted with a running palmette design. There were also found a lecanē, a stamnos painted with black bands, a handleless amphora with encircling bands left in the red clay, an oenochoē on which is painted a horse, a second with an ivy vine painted in white about the neck, an olpe with a ribbed body, and an almost cylindrical vase, without a foot and with a flat mouth, as Collignon et Couve, *Cat. des vases peints du Mus. Nat. à Athènes*, no. 1603.

Nos. 368-378. Small fragments of Megara bowls.

Nos. 379-394 are the common gray flasklets of Roman date.

Nos. 395-426. Miniature lutrophori. Height, 0.2 m. to 0.3 m. (?). Of these, seventy fragments were found, thirty of which are necks. They show both types of the lutrophorus, with one and with two high vertical handles,¹ and have the slim form and the foot, with the softer curves, of the later red-figured lutrophorus.² The different varieties of the flaring mouth are indicated in Fig. 1.

¹ For the two-handled lutrophorus, cf. the vase-painting in *Mon. d. Instit.* vol. X, pl. 34; for the one-handled, that in Dumont et Chaplain, *Les céramiques de la Grèce propre*, vol. I, pl. ix; for the latter with two horizontal handles in addition, that in Έφην. Αρχ. 1897, pl. 10, 2. Both varieties of the one-handled or hydria type are found among the miniatures.

² Cf. the grave-lutrophorus published by Wolters, 'Die rotfigurige Loutrophoros,' *Athen. Mitth.* XVI (1891), p. 372. Since, with one exception (cf. Richards, *Jour. Hell. Stud.* XIV [1894], pp. 193 f.), no lutrophorus vases have been published, references must be made to their representations in vases-

The miniature follows its prototype in the scheme of decoration. It is not necessary to give the details, but it may be mentioned that even the broad bevel which, painted with a palmette or other ornamental band, ornaments the lower part of the neck, in the more elaborate lutrophori,¹ appears occasionally.

On the mouth and handles is the snake line painted in white, — the well-known decoration of the grave-lutrophorus. Here, as there, it is a snake- or wave-line, or zigzag, often accompanied on the mouth by a second similar, but narrower, band nearer the rim.

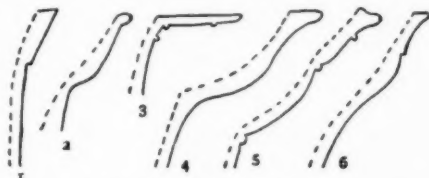


FIGURE 1.—TYPES OF MOUTHS OF LUTROPHORI.

This decoration is evidently characteristic of the class, and, as these vases are not sepulchral, it cannot, when found on the grave-lutrophorus, be interpreted as a snake-line,² used symbolically of the grave. On the neck the main design is one or two attendants from a toilet scene; on the body, a toilet scene.³ These miniatures had no practical use; for the channel of the neck is narrow, — in one case with a diameter of only 0.06 m., — and the clay is often thick, and left rough on the inside, while on some the mouth is enclosed, except for a small aperture in the centre, as No. 3 in Fig. 1.

It is of interest to find these miniatures of the vase, which was the one most commonly chosen to carry the water for the nuptial bath,⁴ used as

paintings or to the grave-lutrophorus. Lutrophori have been found in Athens, chiefly in the Pre-Persian layer south of the Parthenon, and near the Propylaea in the excavations of 1873. To the list of representations on vases (Wolters, *op. cit.* p. 385) are to be added the two published in the 'Εφημ. Ἀρχ. 1897, pp. 128 ff., pl. 10.

¹ Cf. Furtwängler, *Sammlung Sabouloff*, vol. I, pl. lix; Wolters, *op. cit.* p. 372; etc.

² The usual interpretation; cf. Furtwängler, *op. cit.* text to pls. lviii, lix; Herzog, *Arch. Zeit.* XLI (1882), p. 137; Collignon, article 'Loutrophoros,' Daremberg et Saglio, *Dict. antiq. gr. et rom.* p. 1318; Brückner und Pernice, *Athen. Mitth.* XVIII (1893), p. 143. On the grave-lutrophorus more elaborate forms are also found; cf. *Mon. d. Instit.* vol. III, pl. 60, vol. VIII, pl. 5, 1 g; etc.

³ Of the black-figured examples, only necks remain. On one are two flying women dressed in himations, while an altar(?) stands on the ground; on a fragment of another is the lower part of a man, dressed in a himation, walking to the right. Of the lutrophori found on the Acropolis at Athens, the designs of the black-figured ones are chiefly processions; of the red-figured ones, sacrificial processions, processions of gods, and toilet scenes.

⁴ Milchhöfer (*Athen. Mitth.* V [1880], p. 176 and foot-note 2) was the first to identify this vase with the lutrophorus used for the nuptial bath, and also as a grave monument for those who died unmarried.

offerings at a spring from which the fresh water requisite for the nuptial bath was taken.¹ As a class, these vases were not made for the one purpose, as *ex-votos* to be dedicated to marriage deities; for one has been found in the precinct of Amynos and one in the precinct of Dionysus, in the district between the Areopagus and the Pnyx in Athens.² However, it is natural to assume that their presence in the cave at Vari was due to the special use of their prototype, and it is difficult to explain on other grounds the large number, which implies some connection with the local worship. The possible explanation that miniatures of vases used for carrying water would be appropriate offerings at a spring cannot be accepted, because of the small number of amphoras and pitchers among the vases. The theory that miniatures of toilet vases would naturally be found at the shrine of the Nymphs, the protectors of young girls, is refuted by the small number of other varieties of toilet vases in the vase-find. These miniatures may have been offered when the nuptial water was taken from the spring, or at the less formal sacrifice which young girls offered to the Nymphs before their marriage,³ or on any occasion requiring an offering to these deities of marriage.⁴

¹ Porphyry, *De Antris Nympharum*, 12: ὅθεν καὶ τὰς γαμουμένας . . . λουτροῖς κατεχεῖν ἐκ πηγῶν . . . ἢ κρητῶν ἀενάων εἰλημμένοις. Euripides, *Phoenissae*, l. 347, Schol.: ἐπὶ ἐγχευοῖσι ποταμοῖς ἀπολούεσθαι.

² It is, of course, true that to local heroes was sometimes offered the pre-marriage sacrifice (Pausanias, II, 32, 1), but we know of Amynos only as a Hero Physician (*Athen. Mitth.* XVIII [1893], p. 233).

³ Cf. Gardner and Jevons, *Manual of Greek Antiquities*, p. 345; also Plutarch, *Anat. Narr.* 1: ἔως ἡ κόρη κατὰ τὰ πάτρια ἐπὶ τὴν Κισσόεσσαν καλουμένην κρήνην κατῆγει ταῖς Νύμφαις τὰ προτέλεια θύουσα, where the sacrifice does not refer to the more formal ceremony to the γαμήλιοι θεοί, for in Boeotia (the passage refers to Haliartus) this took place at the altar of Artemis (Plutarch, *Aristides*, 20). Probably, in this inaccessible cave at Vari, the ceremony took place when the water was taken from the spring.

⁴ Dr. Hartwig (*Ἐφημ.* 'Αρχ. 1897, p. 138) notes the discovery, in excavations near the Propylaea on the Acropolis at Athens, of some miniature or votive lutrophori, which, with great probability, he connects with the precinct of Artemis Brauronia, and regards as offerings made by young girls to the goddess. Dr. Wolters (*op. cit.* pp. 383 f.) adds to his list of grave-lutrophori five votive ones (nos. 29, 30, 32-34) from the museums. In addition to those given by Wolters, two have been recently acquired by the National Museum at Athens:

(1) No. 12540. Lambros Collection. Red-figured. Three handles. Height, 0.34 m. On the neck, a woman presenting an alabastron to a second; on the body, a toilet scene. The central figure is a girl, seated to left, holding a large lutrophorus in her lap; on either side, two attendants.

(2) No. 12280. Red-figured. Two handles. Height, 0.3 m. On the neck, a woman closely wrapped; on the body, a toilet scene. The central figure is a bearded man, seated to left, resting his right hand on a table; a fillet binds his hair, his cloak has fallen, leaving the upper part of the body bare. A winged

INSCRIPTIONS ON VASES

On eighteen vases are incised inscriptions. Their facsimiles¹ are given in Fig. 2. Nos. 6, 7, 16, and 18, and 1 and 2 were cut each on the mouth of a crater, the first four just inside the rim, the others on the rim itself; Nos. 3, 4, 5, 8, and 9, on the foot of a scyphus, and No. 15, of a saucer; No. 10, around the neck of a cantharus; No. 17, on the inside of a saucer; and Nos. 11, 12, 13, and 14, on the sides of small vases. Both the Attic and the Ionic alphabets were used. The inscriptions are accordingly grouped under these heads: (1) Attic, (2) Ionic, and (3) Undetermined, the last class being made up of those, which, owing to the lack of characteristic letters, may belong to either alphabet.

ATTIC

1. Πο...ρ...ν ἔν γε δέκει με ἀν.θεκ[εν]. Of this inscription five fragments remain, four of which (*a, b, c, d*) are consecutive. The dedicator was forced to crowd his letters at the end and, finally, to cut the last two syllables.

Eros flies down. From either side runs a winged attendant. Cf. the somewhat similar one in Berlin, *Vasensamm.* no. 2630.

To these should be added an example in the Louvre:

(3) Louvre, Paris. Red-figured. Height, 0.18 m. On the neck, toilet scene with women; on the body, Eros bringing an ornament to Aphrodite. Found in a tomb at Bengazi in the Cyrenaica. (The only example of known provenience in the museums.)

The use of the votive lutrophorus was evidently much influenced by the two special uses of its prototype. This was to be expected, as these two uses were so closely associated in Attic life with important events, marriage and death. The excavations at Vari reveal that the votive lutrophorus was a favorite offering to the goddesses of marriage. [With regard to the other Attic shrines of the deities of marriage, so far as they have been excavated, at Callirrhoe, on the Ilissus, where the Athenian girls obtained the water for the nuptial bath (Thucydides, II, 12), the lutrophorus was not found; but the yield of vases was very small. The same is true of the sanctuary of Amphiaraus, where Aphrodite and the Nymphs were worshipped (Pausanias, I, 34, 3). This sanctuary was so often under Attic rule that we may believe that the Attic vase would be used there: cf. Frazer, *Pausanias*, vol. II, p. 463. I do not know whether or not any were found in the excavation of the shrine of Aphrodite on the Sacred Way (Pausanias, I, 37, 7).] Its sepulchral use must have been limited to the graves of those who died before marriage. The vase represented as standing on the top of a grave stele, on an Athenian white lecythus (Birch, *Ancient Pottery*, opp. p. 395), is probably a votive, not a grave, lutrophorus.

¹ These are slightly under the actual size.



FIGURE 2. — INSCRIPTIONS ON VASES FROM VARI.

bles, *θεκεν*, on the inner side of the mouth. The inscription is metrical, the latter part forming the last three feet of an hexameter, and, to judge from the length of the mouth, consisted of two verses. For the rare omission of the elision in metrical inscriptions, in the formula *με ἀνέθηκεν*, cf. Allen, 'Greek Versification in Inscriptions,' *Papers of the American School at Athens*, 1885-86, pp. 136-137. The inscription was cut on a red-figured vase of the early fine period, dating about 460 B.C. (PLATE X). We have, then, a very late use of the cross-barred theta.¹

2. Διόμνεστος ἀν[έθηκεν].

3. *ἱερά.*

4. ἡ[ι]ερά.

5. Τιμό. This formula, the name of the dedicator standing alone in the nominative, is found on votive vases from Naucratis ('Naucratis,' *Annual of the British School at Athens*, 1898-99, p. 55, nos. 66 and 108). Rouse, *Greek Votive Offerings*, p. 324, finds only one possible example (this on a vase) among all classes of votive offerings. Cf. also No. 11.

6.ὁ καὶ Πομπ[ι...] or Πομπ[ι...]; cf. No. 5 or, with the verb, cf. No. 2. Either formula may have been used in Nos. 7, 13, 16, 17, and 18.

IONIC

7.ξένη. A ⊙ was found on a fragment probably of the same vase.

8. Μίκα καλὴ ἀνέθηκεν.

9. [Νύμφ]αις ἱερός. The form of the dative ending shows that the Nymphs, and not the Charites (the other feminine deities worshipped in the cave [see p. 295]), are to be understood.

10. Ἐτ[.... ἀνέθ]ηκεν.

11. [Ἐπι or Εὐ]νομίδης.

UNDETERMINED

12. [.... ἀνέθ]ηκεν.

13. Ἄτ....

14. Νύμφ[αις ἱερός] (cf. No. 9) or Νύμφ[αι] (cf. No. 15). The broad, early Attic form of the *mu* is probably due to the curved surface of the vase, and was not intentional.

15. [Νύμ]φαι. The nominative must stand here, as there is room on the fragment for the *sigma* of the dative, had the engraver desired to use it (cf. Rouse, *op. cit.* p. 235). When found at Naucratis, it is explained as a Samian custom (*Naucratis*, p. 54, no. 30). For a third variety of votive formulas, used on a vase dedicated to the Nymphs, cf. Kaibel, *Inscr. Graec. Sic. Ital.* no. 860.

16. Ἀριστο....

17. νοιο or ξιο

18. ς

19. *Graffito.*

¹ With the exception of this instance, the latest use of ⊕ known to me is on the Pandora cylix in the British Museum (*Cat.* vol. III, D 4), a vase of the late severe period.

THE TERRA-COTTA STATUETTES

The terra-cottas number eighty-five. With one exception, all are broken, while of many there are but small fragments. Chronologically they cover a period which extends from about the middle of the fifth century B.C. into Graeco-Roman times. The fifth-century and "Tanagra" types are represented in about equal numbers, while the large proportion of statuette-vases is noticeable. The late Hellenistic type is little represented, as usual in Attica. Naturally, at so small a shrine, we do not find one largely represented type of local manufacture. Moreover, the proportion of statuettes of local deities is small: Pan is represented only three times, Apollo not at all; of the deities associated with Pan, Silenus, three times in vases of the fifth century, once in the statuette-vases, the Satyrs, once; the Nymphs, probably once, in the Satyr and Nymph group No. 63. As the Pans and Sileni are so common in the fifth century, and the Sileni and groups of Nymphs and Satyrs in the Hellenistic period, the proportions found here are the usual ones. As to the other deities, if we interpret the female figures and masks of the fifth century as deities, Demeter is represented six times, Aphrodite three. Aphrodite is also found once among the statuette-vases.

The quality of the terra-cottas is excellent, considering the simplicity of the shrine. Nos. 36, 41, and 52 are worthy of note. On the "Tanagra" types only the purely Attic styles of head-dress are found. No new use of color can be detected.

ARCHAIC

No. 1 (PLATE XI, 12). The mask of a woman, with features and treatment of the hair similar to those of the Apollo of Tenea. As this was found with vase-fragments, it cannot have been offered in the cave earlier than the middle of the fifth century, the earliest date of the vase-find.² This is the only terra-cotta found intact. Clay, light-brown, hard.

¹ In PLATE XI the figures 1-16 correspond to the catalogue numbers as follows: 1, 39; 2, 40; 3, 52; 4, 41; 5, 42; 6, 63; 7, 60; 8, 61; 9, 63; 10, 8; 11, 44; 12, 1; 13, 53; 14, 2; 15, 3; 16, 20.

² Cf. p. 329. This may be a late preservation of an early hieratic type. A mask of the fifth-century style was found in a late Hellenistic grave at

FIFTH-CENTURY TYPES

No. 2 (PLATE XI, 14). A naked, bearded Pan seated on the top of a rock, holding the syrinx near his mouth. The horns rise from a knob over the forehead, and branch out on either side, being joined to the head, thus giving the appearance of an elaborate head-dress. Traces of red on the body. Clay, light brown, hard.

No. 3 (PLATE XI, 15). Slim, bearded Pan standing, holding a syrinx of four pipes near his mouth. A short chlamys hangs down the back from the shoulders, forming a background. Clay, red-pink, hard.

No. 4. Naked Pan with goat's legs and a tail, seated on a rock. Head and arms are wanting. Height, 0.069 m. Clay, light brown, hard.

Nos. 5, 6, and 7 are the common figures of Silenus, squatting on the ground. In Nos. 5 and 6 he plays the double pipes. In No. 7 only the head and breast remain; cf. Martha, *Cat. des figurines en terre cuite du Mus. de la Soc. Arch. d'Athènes*, nos. 464-473. Height, 0.06 m. Clay, light brown or red, hard.

No. 8 (PLATE XI, 10). The mask of a woman with stephane. The hair is parted in the middle, and hangs down to the shoulders in a solid mass. The common type. Clay, light brown, soft.

Nos. 9 and 10. Seated female figures, with the hands resting on the knees. Much defaced. The folds of the Doric chiton are indicated by symmetrical lines, and oblong ornaments fasten it at the shoulders. Height, 0.075 m. Clay, red, soft.

Nos. 11, 12, and 13. Standing female figures, dressed in chiton and himation, with the right arm left bare. The right hand catches a fold of the himation above the right knee, the left holds a bird under the breast; as Salzmann, *Nécropole d. Camiros*, pl. 18. The heads are defaced or wanting. No. 11 was fastened to an upright plinth, and formed a plaque. The suspension-hole still remains. Height, 0.154 m. No. 12 was made in the same mould, but has been broken from its plinth. No. 13, made from a similar but larger mould, is a statuette. Clay, red, hard.

Nos. 14 and 15. Veiled heads, much defaced. Height, 0.032 m. Clay, light brown, soft. Height, 0.026 m. Clay, pink, hard.

No. 16. A large, coarse head, with a stephane moulded solidly with the head. The hair is represented by a semicircular conventional roll. The common type, of which hundreds have been found on the Acropolis at Athens. Height, 0.058 m. Clay, red, hard.

Nos. 17 and 18. A woman's head, with the hair in an exaggerated "Psyche" knot, gathered in a sphendone. The hair falls in waves on either side of the forehead; cf. Dumont et Chaplain, *op. cit.* vol. II, pl. iv, 4, from Athens. Height, 0.057 m. Clay, light brown, soft. The knot does not narrow quickly toward the end, as in most examples of this type.

Myrina; cf. Pottier et Reinach, *La Nécropole de Myrina*, vol. I, pp. 386, 387, where other examples of the custom are given; cf. also Waldstein, *The Argive Heraeum*, vol. I, p. 40.

No. 19. Canephore carrying a three-panelled basket, of the class described by Heuzey, *Les figurines antiques*, text to pl. 16 bis, 3.¹ Cf. also Martha, *op. cit.* no. 681 (no. 6017, National Museum, Athens), from Cyrene; Ohnefalsch-Richter, *Kypros, The Bible and Homer*, pl. ccvii, 4; C 69 and C 151, from Melos and Amathus, in the British Museum. In this example the arms are not raised to balance the basket; the figure on the front panel is a naked man, striding to the right. The hair is in a roll about the forehead. Traces of yellow on the basket and hair. The body is missing. Height, 0.065 m. Clay, light brown, soft.

No. 20 (PLATE XI, 16). Canephore with a plain basket. The figure is dressed in a sleeveless chiton and a himation, with *diploëdion*, which passes below the right arm and falls in deep folds over the left shoulder. The hair is parted in the middle, and falls in a lock on either side of the head. Both hands hold the basket. Cf. no. 197, from Halicarnassus, in the British Museum. Traces of red on the hair. Broken below the knees. Clay, light brown, hard.

No. 21. Hydrophore. The jar rests on a cushion, and is taller and of a somewhat different shape from the usual type (Pottier, *Les statuettes de terre cuite*, p. 56, foot-note 2). A hydrophore, C 18, from Athens, in the British Museum, carries a similar jar. The hair forms a roll about the forehead. Traces of yellow on the jar. Broken at the neck and at the top of the jar. Clay, brown, soft.

"TANAGRA" TYPES

No. 22. Ephebus wrapped in a cloak, standing. Head and legs missing. Height, 0.063 m. Clay, light brown, soft.

No. 23. Small torso and legs of Eros (?). Clay, pink, soft.

No. 24. Torso and legs of a flying boy (?). A chlamys hung in heavy folds over the left shoulder, across the back, and about the right leg. Height, 0.12 m. Clay, light brown, hard.

Nos. 25-29. Fragments of "Tanagra" standing women, dressed as the figures in Kekulé, *Die griechischen Thonfiguren aus Tanagra*, pl. xiii; Reinach, *Les antiquités du Bosphore Cimmérien*, pl. lxxviii, 1. One holds an apple in the left hand.

No. 30. Fragment of the unveiled dancer type, as Stackelberg, *Die Gräber der Hellenen*, pl. lxxv.

No. 31. Woman seated, closely wrapped, her head resting in her hands. Height, 0.68 m. Clay, red, hard.

No. 32. Lower part of the figurine of a woman seated on a rock, as the figure in Kekulé, *op. cit.* pl. ii. The rock is red, the projections brown, and on the back there is a band of hooks in brown. Clay, light brown, hard.

No. 33. Woman seated on a rock, as in Heuzey, *op. cit.* pl. 20, 3. Only the right side remains. Traces of pink on the drapery. Clay, red, hard.

No. 34. Young girl seated on a box, of the usual type. The head is missing. Height, 0.035 m. Clay, red, hard. Cf. Hutton, *Greek Terra-cotta Statuettes*, fig. 23.

¹ Cf. Winter, *Festschrift für Benndorf*, Vienna, p. 319; note to p. 188.

No. 35. Young girl reclining on the ground, as Furtwängler, *Die Sammlung Sabouroff*, vol. II, pl. xciii. The head, arms, and lower legs are missing. The drapery is a soft green. Clay, light brown, hard.

No. 36. Small statuette of a winged girl, kneeling. The wings, head, and arms are wanting. Height, 0.074 m. Curls hang down on the breast and back, a cross-band gathering them in the back. The drapery covers the lower body; at the waist the edge of the drapery is turned back, and then spreads out as a petal. This same effect is found on a kneeling woman, holding a bag of knuckle-bones, from Tanagra (case 103, Boston Museum), and on two figurines from Myrina (case 114, National Museum, Athens). The drapery is a soft pink, the hair yellow. Clay, pink, hard.

Nos. 37-42. Six heads with Attic coiffure. In No. 37 the hair is drawn back into a flat knot at the apex of the head, as on the woman at the left in the Attic grave-relief, Conze, *Die attischen Grabreliefs*, pl. lxxxii, no. 327. No. 38 has a smaller, more upright knot, and is similar to the terra-cotta head in Stackelberg, *op. cit.* pl. lxxv, 1. Both are defaced. Nos. 39-42 (PLATE XI, 1, 2, 4, and 5) wear the hair in a roll. In No. 39 (1) we have the circular roll common on the grave-reliefs, crowned with a stephane cut, as the later ones often are,¹ with perpendicular dashes. No. 40 (2) has a high top-knot on the forehead (cf. the terra-cotta head in Stackelberg, *op. cit.* pl. lxxvii, 1), which was probably cut in horizontal lines ending in deep dashes. In No. 41 (4) the roll comes to a high point at the top, as is often seen on the grave-reliefs (cf. the seated woman in Conze, *op. cit.* pl. lxxxix, no. 359; pl. lxxviii, no. 290; etc.). The treatment of the hair is artistic, rather than natural. In No. 42 (5) the roll is pointed, but less exaggerated, the hair is drawn back from the face, the waves are represented by deep horizontal cuts. Leaves from garlands remain on No. 42 (5) and No. 41 (4). Yellow is found on the roll in No. 41 (4), on the head in No. 42 (5) and No. 41 (4); red, on the roll and head in No. 40 (2); brown-red, on the cheeks in No. 41 (4). Clay, light brown, hard.

STATUETTE-VASES²

No. 43. Silenus leading a goat, which Eros rides. The statuette is badly defaced, but seems to be a replica, in all details, of the one in the Louvre (Heuzey, *op. cit.* pl. 38, 4). Traces of green on the veil, of red on the leg of Silenus. Height, 0.1 m. Clay, light brown, soft.

No. 44 (PLATE XI, 11). A beautiful statuette of a nude young man, standing in repose. The head and neck are bent forward in full relief from the neck of the vase. The left hand, which, with the left arm, is covered with a chlamys, rests on the left hip. The right arm (missing) was probably

¹ As in nos. 12114, 12113, from Eretria, no. 4960 from Asia Minor, and others in the National Museum, Athens.

² These belong to one class, — a lecythus or oenochœ, having for its obverse side a terra-cotta figure or group. The mouth of the vase is missing, except in four cases, — Nos. 46, 52, 57, and one undescribed, in all of which it is a trefoil.

extended, holding a cup or pitcher, as in the somewhat similar example published by Reinach, *op. cit.* pl. lxx, fig. 7. The hair lies in thick clusters about the forehead, and falls in long curls on the breast. A garland and crown decorate the hair. The face is carefully retouched. The hair-waves are indicated by clusters of crescents. Traces of yellow on the hair. The figure is broken off at the hips. Clay, pink-red, hard.

Nos. 45-48. Naked child reclining in a grotto. In only one can the figure be restored; here the right hand is extended, holding a dog by the tail. The two heads, remaining, have the calathus, once with broad ribbons, and hair-dress typical of the class (Furtwängler, *Vasensamm. zu Berlin*, nos. 2911, 2914, 2922-24, 2928; no. 2083 in the National Museum, Athens; *Compte Rendu*, 1876, pl. v, 16, 17; *Arch. Zeit.* XXII (1864), pl. clxxxii, 4; G 4 in the British Museum). Clay, light brown, hard.

No. 49-51. Small fragments of heads of same.

No. 52 (PLATE XI, 3). Head of a young woman. The rest of the figure is missing. The head inclines far to the right, and bends forward. A veil (missing) formed the background, probably covering the hair, which is done in a high knot on the top of the head. Great care has been given to the hair. The coroplast curved the locks about the forehead in great variety, and then made fine grooves along each lock near the face,¹ thus obtaining the effect of the soft hairs which lie on the forehead. The broader waves of the hair at the side are deeper and heavier on this side away from the light. The eyelids are carefully retouched. The hair is yellow. The neck of the vase is closed near the neck of the figure. Clay, pink, hard.

No. 53 (PLATE XI, 13). Naked boy seated in a high-backed chair. He is represented in three-quarters view, the left knee being in low relief. The head is bent forward, and looks up smilingly; the right hand, extended across the body, holds an apple (?). The head-dress is a calathus, resting on a large roll, decorated with leaves. Clay, red, hard.

No. 54. Aphrodite Anadyomene. The upper part of the figure is broken off at the breasts. Height, 0.035 m. The right hand holds out the drapery at the side, as in the Boston Museum example (*Annual Report*, 1900, pp. 80 f.). The basis was circular and high; the shell missing. Clay, pink-red, hard.

No. 55. Head of a young girl reclining toward the left; the hair falls on the breast. The body is missing. Europa on the Bull (?). Clay, brown, hard.

No. 56. Head of a young child, with wreath and calathus; figure missing. Height, 0.025 m. Clay, brown, hard.

No. 57. Small head of a young woman, the hair in a roll about the forehead; body missing. Height, 0.015 m. Clay, pink, hard.

No. 58. Upper part of a woman, dressed in a Doric, high-girt chiton, raising her arms above her head. The head is wanting. Clay, light brown, hard.

No. 59. Lower part of a standing woman, as Pottier, *op. cit.* fig. 38. Clay, light brown, hard.

¹ These grooves, so characteristic of bronze technique, are not found commonly among terra-cottas. They are seen on two heads with Phrygian caps in the National Museum, Athens, on the locks escaping from the caps.

LATE TYPES

Nos. **60** and **61** (PLATE XI, 7 and 8). Two examples of the coarse old woman who covers the lower part of her face with her himation. [Heuzey, *op. cit.* pl. 51, 1, 2, and 3 (text): *Compte Rendu*, 1865, pl. vi, 6; 1869, pl. iii, 11; 1875, pl. ii, 31: Paris, *Elatée*, pl. xi, 8: *Terres-cuites antiques*, *Coll. Lecuyer*, pl. Q², 3 (text), similar to Fig. 7: no. C 508, A (a fragment from Cyprus), in the British Museum: no. 6045, from Peiraeus, and a second, from Tanagra, in the National Museum, Athens, similar to Fig. 8: also, in the National Museum, no. 4689 (from Tanagra), one fragment from the Cabirium, and Martha, *op. cit.* nos. 953-955 and 960 (Dumont et Chaplain, *op. cit.* vol. II, pl. xxiv, 3; Pottier, *op. cit.* p. 123, fig. 43), of unknown provenience.] Clay of No. **60**, red, hard; of No. **61**, pink, soft.

No. **62** (PLATE XI, 6). Grotesque face or comic mask of a young man, with thick lips wide open, a broad upturned nose, a deep pouch over each eye, and a perpendicular furrow on the forehead. The face is broken on all sides. The piece is solid, with a slightly concave back, and is covered on both sides with a deep red glaze. On either side of the chin is a hole running horizontally, but the two holes, though meeting in the centre, do not form one continuous opening. Clay, light brown, hard.

No. **63** (PLATE XI, 9). Fragment of a group composed of a Nymph(?) and a Satyr, showing the head and bust of the Satyr in relief, from which the forehead and part of the left side are wanting. The Satyr, bearded and with goat's ears, raises the syrinx to his mouth, looking up, with an expression of fear and cunning, to the Nymph(?), whose left hand rests on his left shoulder. A skin(?) covers the left shoulder and the lower breast. There is careful modelling of the coarse features, the muscles of the left hand are indicated, and the upper part of the face shows skilful retouching; the eyelids are cut in deep and sharp; the wrinkles on the brow, by the eyes and nose, are marked. Large pieces of a black-green glaze still remain on the skin(?), the syrinx, the beard, and the fingers of the Nymph; the rest of the surface is a dull black. White is found on the black glaze. The late form of the syrinx shows that the terra-cotta cannot be earlier than Graeco-Roman times. (Furtwängler, *Der Satyr aus Pergamon*, p. 7.) Clay, light brown, hard.

MISCELLANEOUS OBJECTS

Nos. **64-66**. A turtle, dove, and frog; the last is painted brown, with yellow spots.

Nos. **67-69**. Articulated dolls.¹

Nos. **70** and **71**. Fragments of a throne, and of a column with one plinth.²

¹ The dolls, the grotesque head (No. **63**), and the toy animals may have been offered to the Nymphs by young girls before marriage (*Anthol. Pal.* VI, 280), but one expects to find a larger number. This suggests that perishable varieties were greater favorites.

² Among the other fragments is the neck of a jug of coarse red clay, unpolished, with a diameter of 0.03 m. The mouth was flattened on either side to receive a suspension-hole; on the front was stamped the face of a woman.

BRONZE, IRON, AND GLASS OBJECTS

There are few articles of bronze, aside from the coins: a few finger-rings, a small circular band (diameter, 0.02 m.; width, 0.01 m.), a strainer, an unidentified object, and a cow-bell (with part of a second), from which the clapper is missing. The bell was found at the north end of the artificial wall (p. 274) at a depth of 1 m., together with vase-fragments, and was possibly a votive offering to Pan.¹ Iron is represented by two or three finger-rings and some nails; glass, by a few small fragments, probably from one object, of the iridescent ware of late Hellenistic and Roman times, and by the upper part of one of the common small amphoras of opaque glass.

LIDA SHAW KING.

PROVIDENCE.

¹ A bell bearing a dedicatory inscription was found at the Cabirium (Walters, *Cat. of Bronzes, Brit. Mus.* no. 318).

THE CAVE AT VARI

V

COINS

THE coins found in the cave at Vari are of types already published. They have been catalogued as indicated below and placed in the "find department" of the Numismatic Museum at Athens. Without exception they are of bronze.

SUMMARY

| GREEK | No. of Coins Æ |
|---|--|
| 1. Athenian coin of circ. 220-86 B.C. (Head, <i>Historia Numorum</i> , p. 325; cf. <i>Br. Mus. Cat. of Gr. Coins, Attica, etc.</i> (1888), p. 83, pl. xiv, 11) | 1 |
| <i>Obv.</i> "Head of Athena Parthenos r., wearing ear-ring and close-fitting helmet with triple crest, adorned in front with the foreparts of four horses abreast, at the side with a flying Pegasus or griffin, and on the back with a scroll resembling an aplustre; border of dots." | <i>Rev.</i> "A ΘΕ Tripod. To l., poppy-head; to r., thunder-bolt." |
| <p>On the Vari coin the poppy is more distinct than on the example in <i>Br. Mus. Cat.</i> pl. xiv. Cf. with silver coin, Head, <i>op. cit.</i> p. 321, no. (24), of 186-146 B.C.</p> | |

ROMAN IMPERIAL

2. *Constantinus Magnus* (307-337 A.D.¹).
1 example (or variety) of type published by Cohen, *Monnaies Romaines*, 2d ed., VII, p. 304, no. 638 1

¹ The dates, which are those given by Hill, *Handbook of Greek and Roman Coins*, denote the year in which the title of *Augustus* was received and the year of the emperor's death.

| | No. of Coins Æ |
|---|----------------------|
| 3. <i>Constantus</i> (337-350 A.D.). 1 example (or variety) of type published by Cohen, VII, p. 420, no. 106 | 1 |
| 4. <i>Constantinus II</i> (337-361 A.D.). 36 examples (or varieties) of type published by Cohen, VII, p. 446, no. 44; 5 examples (or varieties) of type published by Cohen, VII, p. 468, no. 188; 5 illegible ¹ | 46 |
| 5. <i>Julianus Philosophus</i> (360-363 A.D.). 3 examples (or varieties) of type published by Cohen, VIII, p. 45, no. 16; 1 illegible | 4 |
| 6. <i>Jovianus</i> (363-364 A.D.). 2 examples (or varieties) of type published by Cohen, VIII, p. 79, no. 32 | 2 |
| 7. <i>Valentinianus I</i> (364-375 A.D.). 1 example (or variety) of type published by Cohen, VIII, p. 88, no. 12; 3 examples (or varieties) of type published by Cohen, VIII, p. 92, no. 37 | 4 |
| 8. <i>Valentinianus II</i> (375-392 A.D.). 1 example (or variety) of type published by Cohen, VIII, p. 142, no. 23; 1 example (or variety) of type published by Cohen, VIII, p. 142, no. 28 | 2 |
| 9. <i>Valens</i> (364-378 A.D.). 3 examples (or varieties) of type published by Cohen, VIII, p. 103, no. 11; 1 example (or variety) of type published by Cohen, VIII, p. 110, no. 47; 2 illegible | 6 |
| 10. <i>Procopius</i> (365-366 A.D.). 1 example (or variety) of type published by Cohen, VIII, p. 122, no. 9 | 1 |

¹ That is, the reverse type.

| | |
|--|-----|
| 11. <i>Gratianus</i> (367-383 A.D.). | |
| 1 example (or variety) of type published by Cohen, VIII, p. 130, no. 30; | |
| 1 example (or variety) of type published by Cohen, VIII, p. 130, no. 34; | |
| 1 example (or variety) of type published by Cohen, VIII, p. 134, no. 71; | |
| 1 illegible | 4 |
| 12. <i>Theodosius</i> (379-395 A.D.). | |
| 2 examples (or varieties) of type published by Cohen, VIII, p. 155, no. 15; | |
| 1 example (or variety) of type published by Cohen, VIII, p. 157, no. 27; | |
| 3 examples (or varieties) of type published by Cohen, VIII, p. 158, no. 30; | |
| 1 example (or variety) of type published by Cohen, VIII, p. 158, no. 31 | 7 |
| 13. <i>Arcadius</i> (395-408 A.D.). | |
| 1 example (or variety) of type published by Sabatier, <i>Monn.</i> <i>Byzan.</i> I, p. 106, no. 40; | |
| 3 examples (or varieties) of type published by Sabatier, I, p. 106, no. 41 | 4 |
| | 83 |
| Unidentified | 64 |
| Total | 147 |

AGNES BALDWIN.

NEW YORK.

THE CAVE AT VARI

VI

THE TERRA-COTTA LAMPS

[PLATES XII-XIV]

THE lamps, nearly one thousand in number, which were found in the cave at Vari¹ are of the type commonly called "Roman," but are of late date.²

Like some of the lamps found in North Africa, they illustrate the transition from the "Roman" to the "Christian" lamp.³

The best and earliest specimens resemble in shape Dressel's *forma* 25,⁴ but the clay is coarser and the workmanship much inferior. Lamps of this form (cf. Fig. 1)⁵ are found in large numbers in Greece, and the fact that they are rarely or never found except in Greek lands seems to indicate that they repre-

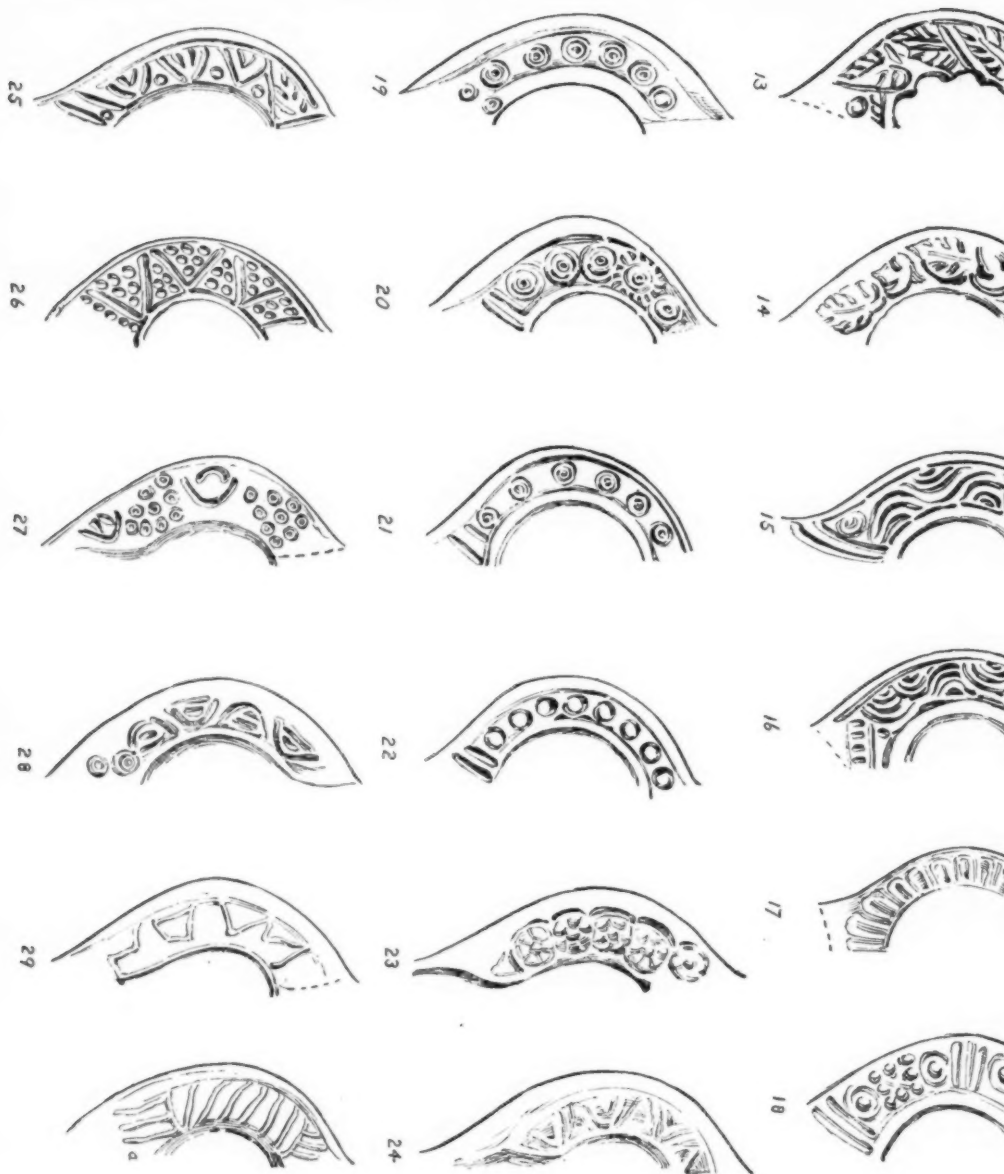
¹ For other considerable finds of lamps in one place, see Birch, *Ancient Pottery*, 2d ed., pp. 132 f.; *Mélanges Archéologiques de l'École française à Rome*, XII, 1892, p. 116; *Πρακτικά τῆς ἐν Ἀθῆναις Ἀρχαιολογικῆς Ἑταιρίας*, 1900, p. 40; *Annual of the British School at Athens*, 1902, p. 390; *Am. J. Arch.* VI, 1902, Suppl. p. 21.

² One wheel-made lamp, of the third century B.C., was found; cf. *Musée de St. Louis de Carthage*, pl. xxiv, no. 24.

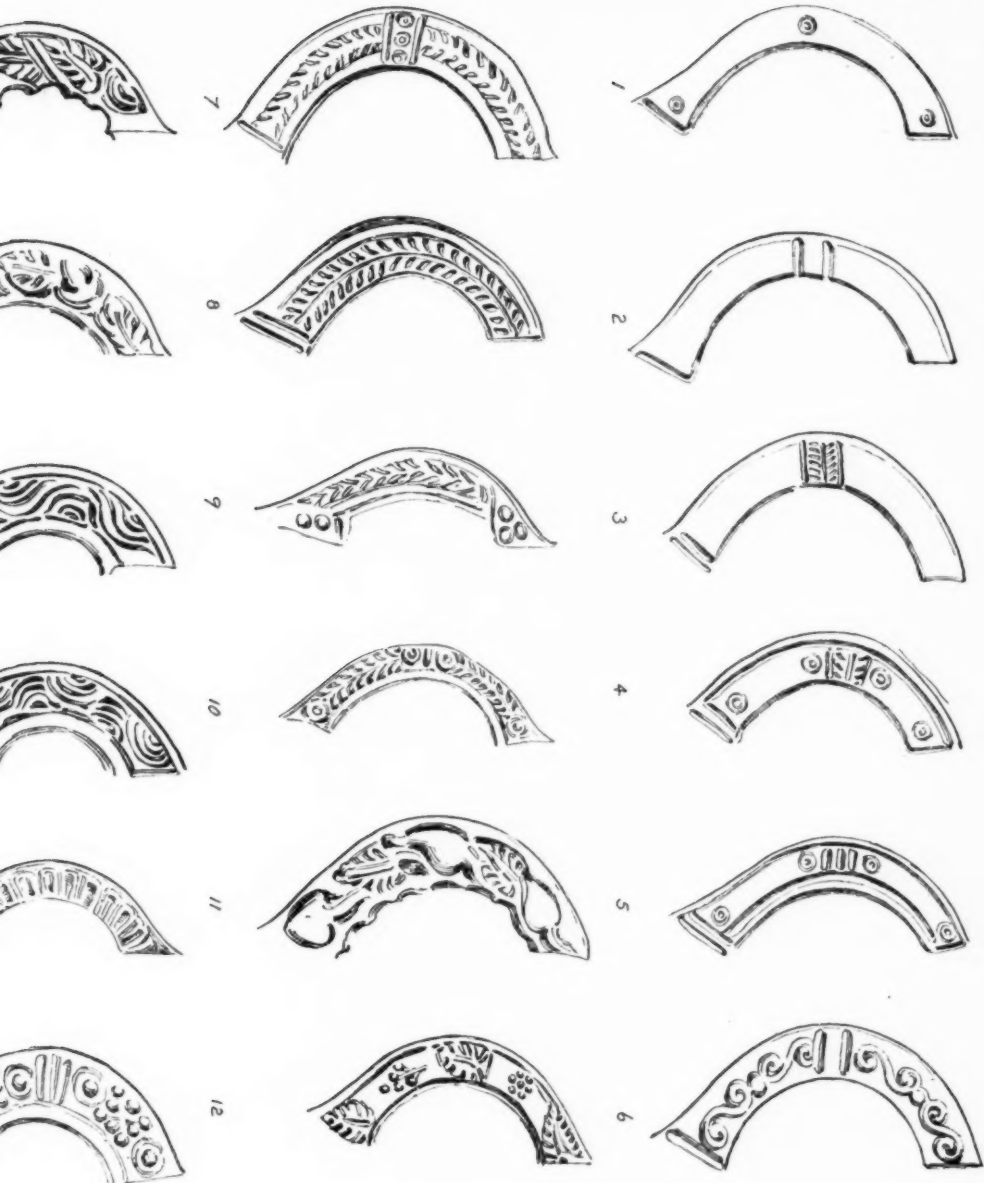
³ La Blanchère and Gauckler, *Musée d'Aloui*, pl. xxxiv, nos. 38-55.

⁴ *C.I.L.* XV, 2, fasc. 1, Tab. iii, no. 25.

⁵ The lamp in Fig. 1, together with fifty or sixty others, most of them in fragments, was found in a conduit at Corinth, in May, 1902. Length, 0.106 mm.; width, 0.084 mm.; height, exclusive of handle, 0.027 mm. On the bottom is incised the name ΚΑΛΛΙΚΤΟΥ, together with a heart-shaped leaf. The National Museum at Athens has on exhibition about fifty lamps of a similar type, and scarcely a museum in Europe is without a specimen.



LAMPS FROM VARI: TYPES OF



TYPES OF DEVICES ON BORDERS



LAMPS FROM VARI: DEVICES ON BORDER AND DISK



1



2



3



4



5



6



7a



7b

SEVEN LAMPS FROM VARI

sent one of the types which the Roman lamp assumed on Greek soil.¹ These lamps are of a fine, pale yellow, or pinkish clay, very thin and delicate, and usually without a slip of any kind. The handle (*ansa*), without which none of these lamps seem to have been made, is straight and perforated, and on its upper surface are two or three grooves. The nozzle (*myra*) is short and rounded, and is without a trace of the arabesques which are a characteristic of the Roman lamps of the first and second centuries of our era.² The upper surface of the nozzle is plain, and is raised a little above the border (*margo*). The border itself is either left plain or is decorated with a kind of ovolo pattern, or less frequently with a vine. In most cases two nobs of clay, 2 mm. to 3 mm.

in height and flat on top, rise, one on either side of the lamp, from the centre of the border.³ The device on the centre of the upper surface (*discus*) consists of a rosette or a relief similar in subject and execution to the reliefs found on Roman



FIGURE 1.—TERRA-COTTA LAMP FROM CORINTH.

¹ Cf. Birch, *op. cit.* p. 132.

² See J. Toutain, in Daremberg and Saglio, *Dict. Ant.* II, p. 1323; La Blanchère and Gauckler, *op. cit.* pp. 149 ff., pl. xxxiv, nos. 23-31; Dressel, in *C. I. L.* XV, 2, fasc. 1, p. 783; J. Fink, *Sitzungsber. d. kgl. bayer. Akad.* 1900, phil.-hist. Classe, p. 687.

³ Similar but taller nobs on lamps stamped with the name *FORTIS*, etc. (Dressel, *op. cit.* Tab. iii, no. 5; Fink, *op. cit.* Taf. iii), are explained by Fink (p. 688) as means by which the two halves of the lamp were held together before the firing. Dressel (p. 783) gives the more probable explanation that they were made in imitation of similar projections on bronze lamps, to which were fastened the suspension chains. In addition to the examples given by Dressel of clay lamps in which these projections are actually pierced (unpublished lamps, sketches of which are in the possession of Costa, Naples) might be added Passeri, *Lucernae Fictiles*, I, Tab. prelim. no. iii, and Proleg. p. vii. Dressel, in *Röm. Mitth.* VII, (1892), pp. 144-157, shows that most of the lamps shown in the work of Passeri are spurious, but makes no mention of the Prolegomena.

lamps of the better period. The bottom (*fundus*) usually has, scratched across it with a fine-pointed instrument, a name in the genitive. This inscription, with a single exception, so far as I have been able to learn,¹ is in Greek letters.²

It is from this type that the lamps from Vari were developed. But the best of them are far removed from their prototype in fineness of clay and in the degree of art displayed. So it would be fair to date the earliest of them as late as the end of the third or the beginning of the fourth century. There are only half a dozen lamps of the fully developed "Christian" type of the fifth century. We may therefore, with a considerable degree of probability, say that nearly all the lamps from Vari are of the fourth century of our era. This hypothesis is strengthened by the testimony of the coins found together with the lamps,³ and by that of the monograms found on the lamps themselves (see below, p. 345).⁴



The lamps from Vari, then, illustrate the later steps in the development of the "Christian" type. The majority of them are ornamented with devices symbolic of the Christian religion. This, together with the fact that none of the earlier lamps were found, indicates that they were brought there by the Christians who used the cave as a gathering place in the fourth century (see p. 284). The occurrence of heathen devices on many of the lamps does not weaken this hypothesis.⁵

The lamps are of a coarse red clay, baked very hard. They vary in length from 65 mm. to 120 mm.; and their length,

¹ Muselli, *Antiquitatis Reliquiae*, no. 140, has C · CLU · SUS; cf. Dressel, *op. cit.* p. 810.

² Cf. Birch, *op. cit.* p. 132.

³ See also pp. 284 f., 335 ff.

⁴ According to Schultze, *Katakomben*, V, p. 123, the monograms,  and , are first dated at Rome 323 and 355 A.D., respectively. The lamps from Vari on which these are found occur in about the middle of the series, chronologically considered.

⁵ The persistence with which heathen reliefs appear on "Christian" lamps is illustrated by a lamp found at Carthage (P. Delattre, *Rev. de l'Art Chrétienne*, 4ième Sér. III, 1892, no. 752), which bears on the disk a representation of Achilles dragging the body of Hector around the walls of Troy.

breadth, and height, exclusive of the handle, are to each other about as 3:2:1. With the exception of two *trymyxi* (one of which is shown in PLATE XIV, 7a and 7b), they are all *monomyxi*. Some of the earlier ones are covered with a red slip. The nozzles all show signs of having been burned, and in one a portion of a wick was found.¹ Olive stones in many bore testimony to the kind of fluid used.

In describing the lamps, the parts will be discussed in the following order:²

- | | | |
|-----------------|-----------------|------------------|
| (1) The handle, | (3) The border, | (5) The reverse. |
| (2) The nozzle, | (4) The disk, | |

(1) **The Handle** (Fig. 2). — This is a solid piece of clay, 10 mm. to 12 mm. in height, at the back of the lamp. Its

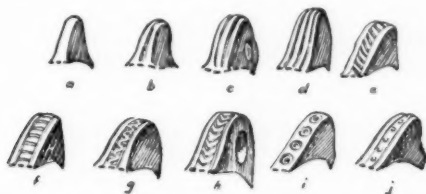
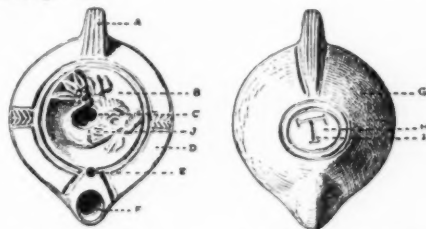


FIGURE 2.—TYPES OF LAMP HANDLES FROM VARI.

upper surface is either left plain (a), or is ornamented with one, two, or three longitudinal grooves (b, c, d), with cross hatching (e, f, g, h), with a row of concentric circles (i), or of

¹ For other cases of wicks found in lamps, see Becker-Göll, *Gallus*, III, p. 396; *Cosmos*, November 24, 1900, p. 695.

- ² A, handle.
B, disk.
C, oil aperture.
D, border.
E, small aperture.
F, nozzle:
wick aperture.
G, body of lamp.
H, reverse.
I, trade-mark.
J, relief.



For the nomenclature, see also Kenner, *Antike Thontampen*, Einleitung, pp. 12 ff.

dots (*j*). It is seldom entirely—more often partially—perforated, but most frequently is unpierced. The lower surface of the under portion of the handle, which extends down over the back of the body (*crater*) of the lamp, is usually ornamented in the same way as the upper surface. At the lower end, where the handle approaches the bottom (*fundus*), there is often an imitation in clay of the means by which in bronze lamps the handle was riveted to the body (Fig. 5, 1). No lamp was found without a handle.

(2) **The Nozzle.**—This calls for little comment. It is short, rounded, and plain, like that of its prototype (see above, p. 339),

but its upper surface, instead of being raised above that of the border, is merely separated from it by one or two lines (cf. PLATE XIV, 4). In the later lamps the transition from the body to the nozzle is so gradual that it is difficult to say where the former ends and the latter begins. In these lamps a broad shallow groove is often found connecting the disk with the wick aperture (cf. PLATE XIV, 4), as in the "Christian" lamp.



FIGURE 3.—TERRA-COTTA LAMP
FROM VARI.

(3) **The Border** (PLATE XII).—In the earlier specimens this shows, better than any other part, the relation between these lamps and the one mentioned above (p. 339). The nobbs have disappeared, but are indicated, as in the case of the nozzles, by lines (Nos. 1-7, 10, 18). Between these lines are seen a palm leaf (Nos. 3, 4) or dotted rings (No. 7). Dotted rings are also found on the outer side of these lines and near the handle and nozzle (Nos. 4, 5, 18). Some borders show also scrolls (No. 6), palm leaves (Nos. 7, 10), or squares of dots (No. 18). As time went on, the lines indicating the nobbs were abandoned. The chief ornaments from this time on are the

palm leaf, very much conventionalized (Nos. 8, 9), which occurs on about one-half of all the lamps; wavy lines, which are next to the palm leaf in frequency (Nos. 15, 16); vine leaves (No. 13) with grapes (No. 11) or berries (No. 12); oak leaves (?) (No. 14); and a rude ovolo pattern (No. 17). Many show dots, dotted lines, and small rosettes (Nos. 19-22). These are probably but little earlier than the conventional ornaments on the borders of "Christian" lamps (cf. No. 23, on a fully developed "Christian" lamp). Later still are the triangles (Nos. 25, 26; cf. No. 24), pyramids of dots (Nos. 26, 27), rude letters and meaningless signs (Nos. 28-30). None of the borders are entirely plain.

(4) **The Disk.** — In about two-thirds of the lamps the disk is entirely plain. It is pierced by from one to seven holes, which served as means for introducing the oil into the lamp. Between the nozzle and the disk was also, in most cases, a small aperture, through which the wick might be raised or lowered.¹

On the disks of about two hundred lamps there is a rosette of from six to twenty petals, or a shell (*pecten*). The reliefs on about eighty show the conventional types of subjects, but the workmanship is of the crudest sort. The gods are but sparingly represented: Artemis, with her hound (PLATE XIII, 4); bust of Athena, with helmet, spear, and aegis (Fig. 3);² Athena, armed with helmet, shield, and



FIGURE 4. — TERRA-COTTA LAMP FROM CORINTH.

¹ Fink, *op. cit.* p. 687, explains this as the aperture through which a peg was passed to hold the two halves of the lamp together when they were first taken from the mould. But the inside of the lower half shows no trace of having received a peg, as it would, especially in these lamps on which so little care was spent, if a peg had actually been used.

² A lamp found in Corinth in May, 1902, may be compared (Fig. 4).

spear, standing with her face to the left (PLATE XIII, 1);¹ bust of Isis, with an uncertain object at her right (PLATE XIII, 3); Eros, playing Pan's pipes, reading from a scroll at a sort of pulpit (PLATE XIII, 7), walking with inverted torch, and praying with uplifted hands. Pan is represented with his pipes (PLATE XIII, 5). The only scene from the adventures of the heroes is the contest of Heracles with the Nemean lion (PLATE XIV, 2). There is one scene from the amphitheatre, — a man fighting with a bear (PLATE XIV, 1). As miscellaneous are to be classed: an acrobat turning a somersault¹ over the back of a bear (PLATE XIV, 6);² a man with a long spear, standing in front of his horse; a man mounted on horseback, with a whip in his right hand; and a figure seated astride a dolphin, with a whip(?) in his right hand (PLATE XIV, 5).³

As symbols appear: the dolphin with the trident (p. 341, footnote 2); the crescent and the *bucranium*. Animals are numerous. We find the bear, boar, lion, ox, sheep, and wolf. One lamp shows an animal like a bear, with the legend ΦΟΒΟC.⁴

¹ Ch. Bigot, *Bulletin de l'École franç. à Athènes*, Août, 1868, pp. 33 ff., mentions a similar lamp in the National Museum at Athens.

² In *Ath. Mitth.* XXVII (1902), p. 260, Abb. 5, the reader will find figured a very much better copy of this type of relief.

³ The meaning of the device on the lamp represented in PLATE XIII, 2, is uncertain. It seems to be a struggle between the human being in the centre and an animal to the right, while to the left, behind the human figure, is a lamb or kid. If it could be proved that scenes from the Bible appear on lamps of so early a date, one might see in this relief an attempt to represent an episode in the life of David (*I Sam.* xvii, 35).

⁴ Ludwig Deubner, *Ath. Mitth.* XXVII (1902), pp. 253-264, regards two lamps similar to this one, which are now in the National Museum at Athens, as grave offerings. "Dass sie (the lamps) aus einem Grabe stammen, ist die nächstliegenden Annahme. . . . Der kilikische Inschrift (Heberdey and Wilhelm, *Denkschr. d. Wiener Akad.* 1896, *phil.-hist. Kl.* p. 38, no. 94) hat uns Phobos als Wächter des Grabes gezeigt: . . . der daemonische Bär, der auf den Lampen ausdrücklich als Phobos bezeichnet ist, soll wie das Licht der Lampe selbst über des Grabes Frieden wachen und alles Unheil von dem Toten fernhalten auf dem dunkeln Wege der zum Jenseits führt" (p. 264). But the lamp from Vari was certainly not used as a grave offering; and a similar lamp, found in May, 1902, in the ruins of a Roman shop near the Agora in Corinth, was evidently not intended for this purpose. Would not the ordinary purpose of the lamp — to dispel the darkness of night, together with its horrors — explain

Of emblems which are surely Christian the following are found: the cross; the monograms, ✠ ✚ ✛ ✜ (see also ✚, on the border and on the reverse of the *trymyrus* (PLATE XIV, 7a and 7b)); the cock, alone and with the palm branch; a fish; two fishes; the dove; the eucharistic chalice; and the chalice with the dove brooding over it (the symbol of the Holy Spirit) (PLATE XIV, 4).¹ Only one obscene subject is represented, and this is on one of the earliest lamps.²

(5) **The Reverse.** — The bottom of the lamp is rarely left entirely plain. A few lamps show only the shape of the bot-



FIGURE 5. — THREE INSCRIBED LAMPS FROM VARI: REVERSE.







tom, outlined in one or more rings or heart-shaped or oval lines, made by means of a blunt instrument in the soft clay. Nearly all have some device as a trade-mark within these lines.

sufficiently the apotropaic use, on the disk of the lamp, of the "daemon of terror"?


I should like to offer, as a suggestion, the reading XPY (Χρ[σ]ου) (?) instead of XΓΥ, for the inscription on the reverse of the lamp figured by Deubner, *l.c.* Abb. 3 and 4 (p. 259). A careful examination of this inscription, two years ago, with the aid of a magnifying glass seemed to show the second letter as P rather than as Γ.

¹ See P. Delattre, *Revue de l'Art Chrétien*, 4ième Sér. I, 1890, pp. 129 ff.; II, 1891, pp. 39 ff., 296 ff.; III, 1892, pp. 133 ff., 224 ff.; IV, 1893, pp. 84 ff.; *Missions Catholiques*, Année 12, 1880, pp. 278 ff., 290 ff., 302 ff., 326 ff., 338 ff., for a systematic classification and explanation of devices found on "Christian" lamps.

² It is an interesting fact that no obscene relief has ever been found on a "Christian" lamp.

In two-thirds of the lamps this consists of a palm leaf, often with small dotted circles on either side. Another frequently recurring device is a number of small rings arranged in pyramids, squares, or circles.¹ Other devices are: the cross; the cross *gammée*,  ; the monogram, ; a palm tree, ; a fish, ; and the eucharistic chalice, , all incised; and a heart-shaped leaf *in relief*.

About two hundred of the lamps have on the reverse side a letter or letters, or a name in the genitive. These are, without exception, in Greek, and are incised. Sometimes with the inscription is a palm leaf or a pyramid of dots.¹ The following is a brief summary of the inscriptions:²

1.  Shape II, longitudinally (4 examples); device, rosette (2 examples).³

2. ΔΕ Shape I; device, *pecten*.


3. ΔΥ Shape II.


4. ΕΤΤΙ Shape II; device, rosette.

- 5 a. ΕΥ Shape I; device, rosette.

- b. ΕΥ Shape I; device, bust of Athena. (Fig. 3.)

6. 
ΔΩ Shape II; device, figure seated astride a dolphin; Εὐδω[ρον]. (PLATE XIV, 5.)

- 7 a. 
ΚΑΡ Shape II (2 examples); device, rosette (1 example).

































- b. 
ΚΑΡ
ΠΟΥ Shape II (2 examples); devices, rosette, *pecten*; Εὐκάρων.














¹ See Dressel, in *C.I.L.* XV, 2, fasc. 1, p. 860, for an explanation of these.

² The shapes I, II, and III are shown in Fig. 5. Shape IV (PLATE XIII, 2) is almost never inscribed. Shape V is the conventional "Christian" lamp.

³ Most of the inscriptions are written across the bottom of the lamp, with the tops of the letters toward the handle. The inscriptions which run longitudinally across the bottom, beginning at the handle, are so indicated. The number of instances of each inscription is given and, when one exists, the device on the disk.

8. ΚΛ Shape II.
9. $\begin{array}{c} \text{ΚΑΡ} \\ \text{ΠΗΛ} \\ \text{ΗΣ} \end{array}$ Shape II; Καρπίμης (cf. *C.I.G.* 4208 c, Καρπίμης).
10. ΚΟΥ Shape I; device, ram facing left.
- 11 a. ΚΥ Shape I (16 examples); devices, rosette (15 examples), bust of Athena (1 example). Shape II, longitudinally (2 examples). Shape III (1 example).
- b. ΚΥ Shape II; device, dolphin.
- c. ΚΥ Shape II.
- d. ΚΥ Shape II.
12. $\begin{array}{c} \text{ΚΥΡΑΚ} \\ \text{ΟΣ} \end{array}$ Shape I; device, obscene; Κύρακος (cf. Aesch. *Frag.* 354, Κύραξ , a dog's name). See Fig. 5, 1.
13. $\begin{array}{c} \text{Α} \\ \text{ΜΡ} \\ \text{ΤΥΡΙ} \\ \text{ΟΥ} \end{array}$ Shape II; Μαρτυρίου .
14. ΟΝΑ Shape I; device, Pan with pipes. (PLATE XIII, 5.)
- 15 a. ΠΛ Shape II, longitudinally (4 examples); device, rosette (4 examples).
- b. ΠΛ Shape II.
- c. ΠΛ Shape II.
- d. ΠΛ Shape II; device, rosette.
16. ΠΟ Shape II (3 examples).

- 17 *a.*  Shape I (2 examples); device, rosette (2 examples).
- b.*  Shape I (2 examples); devices, lion (1 example), Heracles and the Nemean lion (1 example); Στρ. (PLATE XIV, 2.)
- c.*  Shape I; device, rosette; Στρ.
- 18 *a.*  Shape I; device, Eros reading from a scroll. (PLATE XIII, 7.)
- b.*  Shape III (44 examples); device, cock and palm branch.
 Shape II (6 examples); devices, rosette (5 examples), sheep (1 example). See Fig. 5, 3.
19.  Shape I; device, cock and palm branch.
 ΠΑ
- 20 *a.*  Shape II.
 ΤΗ
- b.*  Shape II; device, cock facing right; Σωτηρίας.
 ΤΗΡΗ
 ΛΣ
21.  Shape II.
 Ε
- 22 *a.*  Shape II.
 ΦΗ
- b.*  Shape II.
 ΦΧΗ
- 23 *a.*  Shape V (1 example).
 ΧΙΟ
 ΝΗ
- b.*  Shape V (1 example).
 ΧΙΟ
 ΝΗ
- c.*  Shape V.
 ΧΙΟ
 ΝΗ
 Σ
- d.*  Shape II (34 examples); devices, rosette (8 examples), monogram (2 examples), figure praying (1 example); Χιόνης. See Fig. 5, 2.
 ΧΙΟ
 ΝΗ

- 24 a.  Shape I (5 examples). Shape II (7 examples); devices, rosette (6 examples), monogram, *bucranium*.
- b.  Shape I (4 examples). Shape II (1 example); devices, rosette (2 examples), mounted man (1 example).
- c.  Shape II.
- d.  Shape I: device, bust of woman.
- e.  Shape II (2 examples); device, monogram (1 example).
- f.  In relief.
- 25 a.  Shape I; device, rosette.
- b.  Shape II (2 examples); device, rosette (1 example).
- c.  Shape II.
26.  Shape I.
27.  Shapes I and II; device, rosette.
28.  Shape III.
29.  Shape I (5 examples); devices, rosette (3 examples), crescent, dolphin with trident. See p. 341, note 2.

SAMUEL ELIOT BASSETT.

NEW HAVEN.

American School
of Classical Studies
at Athens

EXCAVATIONS AT CORINTH: 1903

PRELIMINARY REPORT

THE excavations at Corinth, conducted by the American School of Classical Studies at Athens, were resumed at the end of March, 1903, and with slight interruptions continued until the middle of June.

Digging was begun to the southwest of the Old Temple, its object being to reach the ancient Agora and determine its western and southern boundaries, its northern limit having been found previously. Early in May, difficulties with the landowners compelled the stoppage of work here for the season. It is to be hoped that funds may be forthcoming to enable the School to take up the work again in 1904.

Though the excavation in this section is incomplete, part of the end had in view in digging here has been attained, for it would seem as if buildings on the west side of the Agora had been found. An interesting deposit of votive offerings was discovered, consisting of terra-cottas of the late sixth, the fifth, and perhaps the fourth centuries B.C. Some of the types are known already from Corinth, others are new. There may be mentioned standing draped female figures, reclining male figures, horsemen, — both armed and unarmed, — hand-mirrors, shields, helmets, breastplates, — the two latter in relief, — and *stelai* surmounted by a Corinthian helmet in relief and decorated on their face by the relief of a twisting serpent.

From the middle of May until the end of the campaign a smaller force of workmen was employed in the main excavation field of previous years and in the Theatre. In the former place may be mentioned the tracing to their source of two small water channels which were discovered a year ago near the "Old Spring"; they date from the end of the sixth or the beginning of the fifth century B.C.

In the Theatre a Greek terrace wall back of the *skene* was reached, at a depth of six metres, but the *skene* itself still lies buried farther to the south. Above the terrace wall there was found a considerable number of fragments — including five heads, two of them intact — of a decorative frieze of good Roman work in high relief; its subject is a Gigantomachia, the figures being of somewhat more than life-size.

The detailed map of the main excavation area of former years was completed, and much progress made in understanding and dating the complicated mass of wall remains.

A School Bulletin, which will give a plan of the excavations with full commentary, is in preparation.

T. W. H.

Archaeological
Institute
of America

THE FOUNDING OF THE SCHOOL AT ATHENS

NOTE. — At the annual meeting of the Managing Committee of the School at Athens, held in New York, May 8, 1903, the following vote was adopted: "That Professor Charles Eliot Norton be requested to prepare a memorandum upon the early history of the Institute and of the School at Athens." Professor Norton has found it impossible to comply fully with the request of the Committee. While we regret this fact, we take great pleasure in publishing without delay the following brief account of the foundation of the School at Athens which he has been so good as to send us for publication. — ED.

THE First Annual Report of the Archaeological Institute of America, dated May 15, 1880, begins with the words, "In April, 1879, a circular was issued stating that it was proposed to establish a society for the purpose of furthering and directing archaeological investigation and research, and setting forth in general terms the objects contemplated and the methods suggested for procedure." This circular had been drawn up by me, and I had obtained for it the signature of eleven persons representing the scholarship, the intelligence, and the wealth of our community. The chief motive which had led me to undertake this task was the hope that, by the establishment of such a society, the interests of classical scholarship in America might be advanced, and especially that it might lead to the foundation of a school of classical studies in Athens where young scholars might carry on the study of Greek thought and life to the best advantage, and where those who were proposing to become teachers of Greek might gain such acquaintance with the land and such knowledge of its ancient monuments as should give a quality to their teaching unattainable without this experience. It had become evident that, if Greek literature and art were to

have their proper place in the education of American youth, fresh effort must be made and new means taken to promote their study. It seemed possible that this object could be accomplished through a society such as was proposed in the circular, and that it was not unlikely that such a society could be formed without great difficulty, because of the widespread and deep interest which Dr. Schliemann's remarkable discoveries, as well as the splendid results of the German investigations at Olympia, had aroused, not merely among scholars, but in the community at large.

The circular met with an encouraging response. A meeting of persons interested in the formation of the Society was held on May 10, 1879; a committee of five, of which I was made chairman, was appointed to draw up a constitution for the Society, and at an adjourned meeting, on May 17, this committee reported a set of Regulations, which was adopted, and the Society was constituted under the name of The Archaeological Institute of America, and organized by the election of myself as President, of Mr. Martin Brimmer as Vice-President, of Mr. Alexander Agassiz, Professor W. W. Goodwin, Mr. H. W. Haynes, Mr. Francis Parkman, and Professor William R. Ware as members of an Executive Committee, of which the President and Vice-President were members *ex officio*. In this Committee—the parent of the present Council—the government of the Institute was vested, and power was given to it to determine the work of the Institute, and the mode of its accomplishment. The means at the disposal of the Committee were not sufficient to enable it to undertake at once any work of great importance, but, contenting itself at first with modest enterprises, it laid out the ground for more considerable achievements. The record of the work of its first year is contained in its First Annual Report. After stating what it had accomplished and what it proposed to do in the field of American as well as of Classical Archaeology, I added: "France and Germany have their schools at Athens, where young scholars devote themselves, under the guidance of eminent masters, to studies

and research in archaeology. The results that have followed from this training have been excellent; and it is greatly to be desired, for the sake of American scholarship, that a similar American School may before long enter into honorable rivalry with those already established."

The project of the foundation of the School was fully discussed during the year after the making of this Report. The importance of such a school was generally recognized, but the difficulties attending its establishment were great, especially that of obtaining the requisite means for its support. In the Second Annual Report of the Committee, presented at the meeting of the Institute on May 21, 1881, the project was again urged, and a plan which had suggested itself to me for the provisional establishment of the School was thus set forth:

"The maintenance and direction of such a school as is proposed might well be undertaken by our chief universities. A common effort on their part could not fail of success. The general features of the scheme are simple. It requires the securing of a proper local establishment at Athens, and an agreement between the universities to support alternately, for such periods as should be determined upon, a professor at the head of the school, who should have charge of its conduct during his term of residence. The details of the project would require discussion, but would hardly present serious difficulties.

"Your committee recommend the appointment of a special committee to take this subject into full consideration, to correspond with the institutions that would be likely to derive benefit from its establishment and might wish to share in its direction, and to take such other steps in the matter as may seem desirable."

One portion of the plan it was thought best to leave for the proposed Committee to develop and to present to the institutions which they might seek to interest in the scheme. It related to the mode in which the means for the running of the School could be obtained. A permanent endowment would,

of course, be the most satisfactory mode, but it appeared unlikely that a sufficient fund could be at once raised to provide from its income for the annual expenses. In the lack of such an endowment, it occurred to me that it was possible that the colleges and universities interested in the establishment of the School might each be asked to provide a small sum annually toward its support, for which the joint subscriptions might be sufficient. There was no precedent for such pecuniary subsidies, and none of similar upited action on the part of our colleges and universities. The plan, when first proposed, met with little encouragement from many of the persons upon whose judgment I most relied. It had, however, the warm support of Professor John Williams White, who had from the beginning taken the most cordial interest in the scheme, and he consented to act as chairman of the committee appointed at the meeting of the Institute on May 21, 1881, to consider the establishment of the School, and to take such steps toward it as might seem advisable.

The Third Annual Report of the Executive Committee of the Institute, presented May 20, 1882, ended as follows: "The executive committee have the great satisfaction of presenting to you the First Report of the School at Athens, from which it appears that the establishment of the School is already secured under the most propitious auspices. Such a result is a matter of congratulation to the Institute, and of gratification to all scholars and lovers of classical learning throughout the country. It has been accomplished by means of the hearty coöperation of most of our leading universities and colleges, and their union in furtherance of a common object is one of the points in the scheme which appears to be of best promise for the School, while in itself it is a fact of no slight import in the mutual relations of the institutions that have in charge the interests of the highest education." In the report of the special Committee on the School it was stated that so favorable had been the answers from the colleges and universities that it had been determined to open the School in the autumn of 1882, and that Professor

Goodwin, of Harvard University, had accepted the directorship of the School for the first year. This fact at once assured recognition of the high character of the School by the world of scholars, and gave confidence in respect to the standard which it would maintain.

This auspicious beginning of the School was mainly due to the good judgment and energy of Professor White, and to him, during the six difficult years in which he remained Chairman of the Committee on the School, its successful operation and firm establishment as a permanent institution were due in no less degree.

It was inevitable that, during the early years of the Institute and of the School, much of the initiative impulse and much of the responsibility for action should fall to me, but it is to the members of the Executive Committee appointed at the meeting for organization of the Institute in May, 1879, that the chief credit for the work accomplished by it is to be ascribed, and for its present position as one of the important institutions for the advancement of learning in the United States. Their wise counsels and their ready sacrifice of time and labor to the work in hand laid the foundation well. Two of them in especial, neither of whom are now living,—Mr. Martin Brimmer and Mr. Francis Parkman,—effectively contributed to the success of the early undertakings of the Institute. In the difficult task of obtaining the means for investigations alike in the Old World and the New, the example and the efforts of Mr. Brimmer were of invaluable service, because of the just confidence reposed by the community in his sound judgment and wise liberality; while the name of Mr. Parkman was an assurance that the work of the Institute, especially in the field of American Archaeology, would be wisely directed. At the same time the name of Professor Goodwin was in itself an appeal to the scholars, and that of Professor Ware to the architects, of the country to give their support to an institution which promised to promote the highest interests alike of classical scholarship and good architecture.

The history of the first twenty years of the Institute remains to be written. Its highest service, perhaps, has been the establishment of the School at Athens, and subsequently of that at Rome. What the former has done to fulfil the object of its founders for the advance of classical scholarship in America has been well set forth by Professor Seymour, of Yale University, in his recent record of its work during its first twenty years.

CHARLES ELIOT NORTON.

ARCHAEOLOGICAL NEWS¹

NOTES ON RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS

JAMES M. PATON, *Acting-Editor*
Wesleyan University, Middletown, Conn.

GENERAL AND MISCELLANEOUS

ARABIA. — **Inscriptions.** — H. DERENBOURG publishes in *R. Arch.* I, 1903, pp. 407-412 (cut), six Semitic inscriptions from Yemen, edited from impressions collected by P. Bardey of Aden. One of them is above reliefs of two winged lions with human heads.

AN INTERNATIONAL CONGRESS OF ARCHAEOLOGY. — It is proposed to hold an International Congress for the discussion of archaeological questions in Athens at Easter, 1905. The Congress is called under a royal decree of May 14, 1901, and the arrangements are in charge of a committee consisting of the Crown Prince of the Greeks, President; the Minister of Public Instruction, Alexander Sp. Roma, Vice-President; Th. Homolle, Director of the French School, Secretary; and the Ephor-General of Antiquities, the Rector of the University of Athens, the Vice-President of the Greek Archaeological Society, the Mayor of Athens, and the Directors of the German, American, English, and Austrian Schools. The executive committee of this body consists of the Minister of Public Instruction, the Director of the French School, the First Secretary of the German Institute, and the Ephor-General of Antiquities. A provisional code of regulations has been prepared, containing fifteen articles. Art. I provides for the meeting of the Congress at Athens and the adoption by that body of a permanent organization. Art. II defines the object of the Congress to be the

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor FOWLER, Editor-in-charge, assisted by Miss MARY H. BUCKINGHAM, Professor HARRY E. BURTON, Professor JAMES C. EGBERT, JR., Professor ELMER T. MERRILL, Dr. GEORGE N. OLCOTT, Professor JAMES M. PATON, and the Editors, especially Professor MARQUAND. In Professor FOWLER's absence, these departments are conducted by Professor PATON.

No attempt is made to include in the present number of the JOURNAL material published after June 30, 1903.

For an explanation of the abbreviations, see pp. 145, 146.

furthering of archaeology by the examination and discussion of scientific or practical questions relating to this science, by the publication of reports of the Congress and of papers presented, and in general by all means which may seem opportune and effective. Art. III creates the general and executive committees already mentioned. Art. IV announces that the Crown Prince will preside over the meetings at Athens. The scientific sessions at Athens will last for five days, and there will be archaeological excursions in continental Greece and among the islands of the Aegean, including Samos and Crete. The Congress will decide whether the sessions shall be general or special. The opening meeting will be held in the Parthenon, general meetings in the hall of the University, and special meetings, in case sections are organized, in the rooms of the Archaeological Society or at the foreign Schools. Art. V provides that after the formal opening of the Congress by the Crown Prince, the Ephor-General and the Directors of the foreign Schools shall report on recent discoveries in Greece and the progress of archaeological science. The Congress will then perfect its organization by the election of four Vice-Presidents from the members who do not reside in Greece. Art. VI provides for the organization of sections, if this shall seem advisable to the Congress. Each section shall choose its President from among the non-resident members. Members of the French School will act as Secretaries. Art. VII makes French the official language of the Congress, in which its records will be kept and its correspondence conducted. Members, however, in discussions and papers may use also Greek, German, English, or Italian. Art. VIII provides that the President and Vice-Presidents shall determine the programme for each day. Art. IX requires that no paper or speech exceed a quarter of an hour. At the end of the session speakers are requested to furnish the Secretary with brief summaries for insertion in the records. Art. X provides for the publication of the Proceedings of the Congress and the most important papers, at the expense of the Archaeological Society, and their sale to members at a reduced price. Art. XI provides that for membership in the Congress it is necessary to announce one's desire to the Committee and to receive a card of admission. These requests, accompanied by notice of any paper or discussion, should reach Athens before the end of December, 1904. Art. XII announces that the detailed programme and itinerary of the proposed excursions will be sent to members in January, 1905, together with a non-transferable card of admission. Arts. XIII and XIV contain rules for registration, etc. Art. XV provides for the formation of a permanent organization and the determination of the next place of meeting before the adjournment. The Committee request suggestions as to questions for discussion, expressing a preference for practical subjects and those capable of prompt and precise solution. They suggest the following: (1) In what spirit and to what extent is it desirable to restore ancient monuments, especially the Parthenon? (2) Plans for the publication of an annual international bibliography of archaeology, of an *Ephemeris Epigraphica Graeca*, of a comprehensive collection of Greek inscriptions in a small form and at a moderate price, of a collection of Greek Christian and Byzantine inscriptions. (3) To what extent and by what means can the study of archaeology and the history of art be introduced into secondary education? What methods have been followed and what results obtained in countries where

this instruction has been given? The call for the Congress is signed by Cavvadias, Ephor-General of Antiquities in Greece.

NECROLOGY.—**Alexandre Bertrand.**—*R. Arch.* I, 1903, pp. 53-60, contains a somewhat long notice by S. REINACH of the life and work of Alexandre Bertrand, since 1883 one of the editors of the *Revue*, whose death occurred December 8, 1902. See *Am. J. Arch.* VII, 1903, pp. 101-102.

Edouard Garnier.—M. Edouard Garnier, who died on March 30, was not only the curator of the National Porcelain Museum at Sèvres, but also an undoubted authority on all points in connection with ceramic art. He was born sixty-three years ago, and had been attached to the Sèvres factory since 1871, succeeding Champfleury as *conservateur* of the Museum some fifteen years ago. He received an artistic training under Ingres, and wrote a number of books, either alone or in collaboration, among these being a *Dictionnaire des Faïences*, *Histoire Générale de la Céramique*, a monograph on the *porcelaine tendre* of Sèvres, of which a translation into English appeared in 1889, in folio size, and another on the porcelain of Menecy. He had commenced a *catalogue raisonné* of the collections in the Museum at Sèvres, but this great work was not finished at the time of his death. He was a frequent contributor to the *Gazette des Beaux-Arts* and to *L'Illustration*. (*Athen.* April 11, 1903.)

Heinrich Keller.—In Dr. Heinrich Keller, who died last week at Zurich, the Swiss have lost one of their characteristic historical scholars. He was the manager of the great paper factory on the Sihl, and a good business man; but, at the same time, he had made himself one of the foremost authorities of his day in the history, archaeology, art, literature, genealogy, and heraldry of his native city and canton. No contemporary surpassed him in local documentary researches. He was one of the editors of the Zurich *Urkundenbuch*, editor of the Zurich *Stadtbücher*, a constant contributor to the *Anzeiger für schweizerische Altertumskunde*, issued many publications on the ancient monuments of his canton, presided over the excavations instituted in the canton of Ticino, compiled the admirable catalogue of the collection of coins in the Swiss Landes-museum, and, in addition to his ceaseless and exact labors with his own pen, was a generous supporter of other scholars in their work. (*Athen.* March 14, 1903.)

Francis Cranmer Penrose.—The death on February 15, at the ripe age of eighty-five, of Mr. Francis Cranmer Penrose, removes a very striking figure from the scientific world. Eminent alike as an architect, an astronomer, and a mathematician, Mr. Penrose in the course of his long life rendered valuable service in all these fields, and also brought his wide range of knowledge to bear upon important problems in art and archaeology. Educated on the foundation at Winchester, Mr. Penrose proceeded to Magdalene College, Cambridge, and in 1842 was elected "travelling Bachelor" in the University, spending part of the next three years in Italy and Greece. While in Greece he prepared the materials for his work on 'The Principles of Athenian Architecture,' originally published by the Society of Dilettanti in 1851, and reissued by the same society, after careful revision, in 1888. Mr. Penrose, having adopted architecture as his profession, served from 1852 to 1897 as surveyor to the fabric of St. Paul's Cathedral. He received in 1883 the Gold Medal of the Royal Institute of British Architects, and in 1894-95 was President of the Institute. When the British School at Athens

was established in 1886, Mr. Penrose consented to act as Director for the first year, having himself planned the house which was built for the School on the site granted by the Greek Government. He had previously taken an active part in the foundation of the Hellenic Society, of which he was an original Member of Council, and ultimately a Vice-President. After his return from Athens he still maintained his keen interest in the School as an active member of the Managing Committee, and he again took charge of it during part of the session 1890-91, while the Director, Professor Ernest Gardner, was fulfilling an engagement in Cambridge. As the result of astronomical observations begun in connection with an occultation of Saturn in 1866, Mr. Penrose published in 1869 a treatise on the prediction and reduction of occultations and eclipses. A new and thoroughly revised edition of this book was published only last year. In the latter years of his life Mr. Penrose, at the suggestion of Sir Norman Lockyer, directed his attention to the orientation of Greek temples, with a view to obtaining, by careful observation on the spot of sun and stars, and by the application of formulae for finding the places of stars at distant epochs, some evidence as to the date of their foundation. The basis of his theory was the assumption that the object sought by the ancients in orienting their temples was to obtain from the stars at their rising or setting, as the case might be, such warning as to the approach of dawn as might enable them to prepare for the critical moment of sunrise, when sacrifices were to be offered. On this subject Mr. Penrose read papers in 1893 and 1897 before the Royal Society, of which he was elected a Fellow in 1894. He was elected Honorary Fellow of his college in 1885, and later received the honorary degree of D.C.L. from the University of Oxford and Litt. D. from the University of Cambridge. The King of Greece also conferred on him the Grand Cross of the Order of the Redeemer. In 1899, on the death of Sir A. W. Franks, he was appointed Antiquary to the Royal Academy. From 1852 till his death he was an active member of the Society of Dilettanti, attending the meetings regularly and observing strictly the traditional ceremonies of their gatherings. (I, *Athen.* February 21, 1903; *London Times*, February 17, 1903.)

TESSERULA AEDIFICIORUM.—In *C. R. Acad. Insc.* 1903, p. 81, G. SCHLUMBERGER describes a small bronze tessera, of the class known as *tesserulae aedificiorum*, which bears the names of the emperor Zeno, Odoacer, and Symmachus. It must therefore be dated about 485 A.D. These tesserae were deposited in foundation walls, and their importance lies in the names of emperors or noble Roman families which they usually bear.

EGYPT

ABUSIR.—**Excavations in 1902-03.**—The German excavations at Abusir have yielded good results. The great system of terraces which extends from the Nile to the pyramid is gradually becoming more distinct, but the work of entering the pyramid is delayed by the large masses of stone which must be removed or supported. In the necropolis of the nobles interesting discoveries have been made, including the tomb of a princess and her attendants. Many Greek coffins and sarcophagi have also been found, which are of much archaeological value on account of their admirable preservation. (*Berl. Phil. W.* 1903, col. 604.)

ABYDOS.—*Excavations in 1903.*—The London *Times*, June 29, 1903, contains a letter from W. M. FLINDERS PETRIE, giving an account of his excavations at Abydos. The clearance of the site of the old temple brought to light in a depth of 20 feet no less than ten successive temples, ranging from 5000–500 B.C. Often all that could be traced was a single course of brick on a bed of sand. The main result was proof that Osiris was not the original god of Abydos. The jackal-god, Upnaut, and the god of the west, Khentamenti, were honored here till the twelfth dynasty. About the time of the fourth dynasty the temple building seems to have been replaced by a great hearth for burnt-offerings, which was full of votive clay substitutes for sacrifices. An ivory statuette of Cheops of the finest workmanship shows for the first time the features of this king. Globular vases of green glaze, with the name of Menes inlaid in purple, take polychrome glazing back to the time of the first dynasty. Pottery was found of forms and material unknown in Egypt, but identical with the neolithic ware of Crete. A great fort like the Shumet-ez-Zebib proves to be a residence of the thirty-second dynasty. The use of iron is now proved for as early a period as the sixth dynasty. There have also been found some long decrees of the fifth and sixth dynasties. Many of the ivory carvings of the first dynasty show great delicacy and refinement, and a figure of an aged king for subtlety and character ranks with the best work of Greece and Italy.

BENI-HASSAN.—*Tombs of the Middle Empire.*—In the London *Times*, June 1, 1903, J. GARSTANG reports the results of his recent excavations among the rock tombs of Beni-Hassan. The tombs already known were of the eleventh and twelfth dynasties, but in a gallery at a lower level were found a few tombs of the sixth dynasty. One, belonging to a prominent courtier, Apa, was decorated with reliefs and paintings of agricultural and other conventional scenes. Below the gallery of the well-known tombs was found an extensive necropolis, remarkable for the preservation of the furniture and for the wealth of material illustrating the customs of the Middle Empire. Four hundred and ninety-two tombs of the eleventh and early twelfth dynasties were opened, of which more than one hundred had remained un plundered. In the tomb of Nefer-y, a chief physician, were found many wooden models representing scenes familiar from wall-paintings, among others a boat with twenty rowers, a granary with models filling baskets with real grain, women making bread, the manufacture of beer from the fermentation of bread, and a sailboat with men hoisting the square sail. Another tomb contained a fleet of war-ships. The coffins were inscribed with new "Pyramid texts" of the time of Unas. These tombs belonged to the middle class, including minor officials of the locality, whose names and portraits appear in the tombs of the nobles in the gallery above. (Same article in *Biblia*, XVI, 1903, pp. 104–108.)

MÂ'DI AND GHÔRAN.—*Houses and Tombs.*—*B.C.H.* XXV, 1901, pp. 379–411 (pl.: 21 cuts), contains a report by P. JOUGUET on the discoveries in the Fayoum at Medinet-Mâ'di and Medinet-Ghôran, in 1901 and 1902. At the former place some trial pits were dug in two large mounds, and an examination of the Ptolemaic cemetery was made, with but little result. The chief object of the work was the discovery of papyri, and in consequence of favorable reports the work was transferred to Ghôran, where excavations were made at the village and the necropolis. The houses in

general have disappeared, but three groups of buildings were marked by low mounds, and proved, in two cases, to be houses, of interesting ground plan and plain indications of upper stories. These houses and the small objects found in them are fully described and illustrated. The third mound seems to have covered a Ptolemaic temple, which was later replaced by a small Coptic convent. The mound yielded a number of fragments of Coptic papyri. The necropolis contained a great number of graves, which are classified in nine groups, from the shallow trenches in which the very poor buried their dead to deep pits lined with smooth stone. Many of the mummies had a cartonnage of papyrus. The sarcophagi are (1) of stone, either oblong or anthropoidal; (2) of terra-cotta, with a flat cover; (3) anthropoidal of wood, decorated on the cover with a head in Egyptian style; (4) of painted wood, with the same form as the preceding but more richly decorated. One rectangular wooden sarcophagus was found. The pottery showed that the village and necropolis were of the second half of the Ptolemaic period.

NAHAS.—**Papyri.**—In *B.C.H.* XXVI, 1902, pp. 95-128, P. JOUQUET and G. LEFEBVRE publish twenty-two papyri from Medinet-en-Nahas, now shown by an inscription to be the ancient Magdola. All were taken from the cartonnage of mummies discovered in 1902 in the Ptolemaic necropolis. They belong to the third century B.C. and to the reign of either Philadelphus or Euergetes, probably the latter. They are all legal documents, and with one exception are petitions nominally addressed to the king and queen, praying for the redress of some wrong. Some of them, and probably all originally, bear a note of the *σπαργός*, generally addressed to an *ἐπιστάτης*, with directions as to the case. They therefore belong to the class of documents described in other papyri as *ἐντέξεις κεκορηματισμένα*.

OXYRHYNCHUS.—**New Papyri.**—The excavations at Oxyrhynchus during six weeks in 1903 prove that the site is far from exhausted, for the yield of papyri was quite in proportion to that obtained in the first campaign. Among the new pieces is a third century fragment of six more Logia of Jesus, a large fragment of the Epistle to the Hebrews, written on the back of a Latin epitome of Livy, Books 37-39 and 49-55, which differs widely in its selection of events from the Periochae. Among the classical papyri is a first century B.C. fragment of an epinician ode by a poetess, perhaps Corinna, and part of a philosophical dialogue, in which Peisistratus is one of the speakers, and Solon, Periander, and others are mentioned. There is also a second century papyrus, containing on one side a long invocation of a goddess, with all her titles in Egypt and the rest of the civilized world, and on the other an account of a miraculous cure ascribed to Imhotep, who is identified with Asclepius. Both writings seem to belong to the Alexandrian school that produced the works of Hermes Trismegistus. These papyri are to appear in Vol. IV of the *Oxyrhynchus Papyri*. (GRENFELL and HUNT, in *London Times*, June 26, 1903.)

THEBES.—**Tomb of Thutmôsis IV.**—*R. Arch.* I, 1903, pp. 413-418, contains a letter of G. MASPERO, published in *Le Temps*, April 10, 1903, giving an account of the opening of the tomb of Thutmôsis IV, in the Valley of the Kings at Thebes. The excavations were conducted by Mr. Carter, the chief inspector, at the expense of Mr. Theodore Davis. Work began in January, 1902, but it was February 3, 1903, before the tomb was

finally opened. It had been pillaged of its valuables in gold, silver, and jewels long ago. Indeed, inscriptions showed that under Armais, less than a century after the burial of the king, restorations had been needed. The rock chambers, however, contained a large quantity of the funeral furniture, which had been broken and cast aside by the plunderers. The king had evidently died before the chamber was finished, as the walls were still rough and undecorated. Among the objects is the body of a chariot of leather and wood decorated with fine reliefs. The fragments are to be removed to the museum at Cairo, where they can be put together, and later a complete publication is to appear.

GREEK WOODEN FURNITURE.—In *Jb. Arch. I.* XVII, 1902, pp. 125-140 (pl.; 12 cuts), C. RANSOM publishes some remains of turned wooden furniture of Greek manufacture, found in Egypt and now in Berlin. A low bedstead with pillow-support at one end is, perhaps, to be assigned to the third century B.C. The mattress-support of palm-wood slats is preserved. Remains of a large stool, or ottoman, and of a couch, both once seated with some kind of basket-work, seem, from the resemblance of the legs to a bronze bed found at Priene, to belong to the second century B.C. A tentative list of known remains of ancient classical carpenter's work is appended.

A GREEK PAPYRUS.—In *Atene e Roma*, VI, 1903, pp. 149-158, G. VITELLI publishes a transcript of a leaf of papyrus, containing fragments of Greek hexameters on both sides. It seems to be four pages from a book, and the author is evidently a Graeco-Egyptian poet later than Nonnus, for he generally observes his rules in the verse. The author and subject are not clear. The exact origin of the papyrus is unknown, but it probably comes from the neighborhood of Hermopolis (Ashmunên). The writing points to a date in the fifth century after Christ.

GREEK VASES AT CAIRO.—A descriptive list of some forty Greek vases of different periods in the museum at Cairo is given by C. WATZINGER in *Arch. Anz.* 1902, 4, pp. 155-160 (8 cuts). Among the funeral hydriae from Hydra are several with inscriptions and some with white ground and polychrome decorations in red, blue, green, and yellow. A well-painted pair of shoes is one device.

BABYLONIA

BABYLON AND FARA.—**The German Excavations.**—The fifteenth *Mitteilungen* of the Deutsche Orient-Gesellschaft brings the news that the great Istar Gate at **Babylon** has been so far excavated that the general plan is clear. The walls are preserved to a height of 12 m. with decorations in relief covering their entire height. Upwards of 130 animals in relief are visible, and others are still below the surface. The gate was double, with the towers fronting the north, and was in the axis of the street Aiburschabu. In **Fara** an old Babylonian necropolis, already plundered, was found, and in it a small collection of about forty clay tablets of a very early period. (B. in *Berl. Phil. W.* 1903, col. 60-61.)

The sixteenth number contains plans and a map in illustration of a report by the architect Andrae on many ancient sites in Mesopotamia. The excavations at **Fara** yielded many interesting small objects and inscribed tablets, many of them entirely uninjured, and of very early date. In

Babylon the Istar Gate is completely excavated. About six hundred cases of enamelled bricks are to be sent to Germany, where the colored reliefs from the palace of Nebuchadnezzar, the Istar Gate and the street of Marduk are to be reconstructed. (*Berl. Phil. W.* 1903, col. 798-799.)

SYRIA AND PALESTINE

ANTIOCH.—**An Oracle of Alexander of Abonotichos.**—A fragmentary inscription from Antioch on the Orontes has been restored by P. PERDRIZET as reading [Φοῖβος ἀκεροκόμης λοῖμον νε]φέλην ἀπερύκει. Α·Ε·Η·Ι·Ο·Υ·Ω. The seven Greek vowels have a magic value, and the hexameter is given by Lucian as an oracle of Alexander of Abonotichos, which was written on doors to keep off a predicted plague. This inscription seems to have been on the base of a statuette of Apollo. (*C. R. Acad. Insc.* 1903, pp. 62-66.)

ANTIQUITIES OF NORTHERN SYRIA.—*B.C.H.* XXVI, 1902, pp. 161-208, 289-290 (7 cuts) contains an article by V. CHAPOT on the 'Antiquities of Northern Syria.' The monuments described are from three districts: I, Pieria and Seleucia; II, Cyrrhastica; III, Euphratesia, Osrhoene, and Commagene. Under II are published three inscriptions from the sanctuary of Zeus Madbachos on Cheikh Barakât, including two not published by Prentice in *Hermes* (1902, pp. 91-120), and a curious dedication of an olive mill on Kafer-Nebo to the gods Seimos, Symbetylos, and Leon. Under III are described several Hittite monuments in or near the village of Kelleklu Oglou on the right bank of the Euphrates. In all sixty-two inscriptions, including seven in Latin, and a number of sculptured monuments are published.

BAALBEK.—**The German Excavations.**—The second year's report of the German excavations at Baalbek deals with the propylaea, the two great temples, and other important Roman buildings in Syria. The Temple of the Sun has only six columns standing above the floor, but the architectural remains allow a reconstruction of this most colossal temple of its time, the second century after Christ. Its foundations contain an entire course of stone blocks thirty feet long and others still more huge. A Greek inscription names the god Ἡλιουπόλιτης and one in Latin mentions his oracular responses. The smaller temple still stands to its full height lacking the roof. The interior of the cella has the same rich architectural decoration in two stories as the peristyle of the great court. The fine door has been cleared and strengthened. At the west end is the adyton or sanctuary, Lucian's *θάλαμος*, an elevated space partly separated from the main cella by walls and pillars and reached by steps, while others lead to a crypt beneath. Sculptured decorations suggest that the temple belonged to Dionysus. The Arabs of the thirteenth and earlier centuries, who made a fortress of the whole enclosure, used this building for a keep. Some light is shed on the partly native cults by the remains of a building connected with the waterworks near Baalbek. Several months were spent in Eastern Syria and the Libanus region in studying the Roman remains, which are chiefly of late imperial times. There are, beside temples, the great colonnaded streets of the larger cities, memorial or decorative arches, theatres, odea, etc. The commanding situations of the temples and the regular plans of some cities are noteworthy. The architecture seems to have been brought from the

west and locally modified. The adyton of the temple, with its crypt, in various forms, is seen to be a characteristic feature. Another is the Nymphaeum, a type of building resembling the Exedra of Herodes Atticus at Olympia, which can be studied in better preserved examples here than in Italy or elsewhere. (O. PUCHSTEIN and others, *Jb. Arch. I.* XVII, 1902, pp. 87-123; 6 pls; 3 cuts.)

BYBLOS. — A Bronze Statuette of Jupiter Heliopolitanus. — In *C. R. Acad. Insc.* 1903, pp. 89-91 (cut), CLERMONT-GANNEAU publishes a bronze statuette, found near Byblos. It represents a beardless personage, clad in a long tunic, over which is a shorter garment divided into squares containing busts and symbols of various kinds. This is not the goddess of Byblos, but Jupiter Heliopolitanus of the temple at Baalbek. Other representations of the same deity are mentioned.

GERASA. — Ancient Remains. — In *Z. D. Pal. V.* XXV, 1902, pp. 111-177 (4 pl; 42 cuts), G. SCHUMACHER gives a full account of the extensive ruins of Gerasa, east of the Jordan, based on surveys and notes made during six visits between 1891 and 1902. The place is suffering from the vandalism of the natives. Excavations have been conducted by Puchstein and Schütz, resulting in the discovery of inscriptions and exact plans of the more important buildings. After a brief account of the situation, inhabitants, and history of Gerasa, which seems to have been founded in the Hellenistic period, the buildings and monuments are systematically described under the following heads: (1) the city walls, bridges, and streets with colonnades; (2) temples, propylaea, and fountains; (3) the two theatres; (4) baths; (5) Christian churches, all of which are post-Roman. Outside the walls are a triumphal gateway, a naumachia, circus, and necropolis, and an extensive reservoir, now called *el-bitkén*. Especially noteworthy seem the long street with colonnades, extending from the forum to the north gate, the temple of the Sun, and the two Roman theatres.

Inscriptions. — H. LUCAS in *Mittheilungen und Nachrichten D. Pal. V.* 1901, pp. 33-47, publishes from the papers of H. Kiepert fifteen Greek inscriptions copied in Palestine in 1870. Thirteen are from Gerasa, and all but one have been published elsewhere. The article contains full references to previous publications. A complete publication of the inscriptions of Gerasa, which number more than ninety, is promised in a later number.

GEZER. — Excavations of the Palestine Exploration Fund. — In *Athen.* February 7, 1903, is a report by R. A. STEWART MACALISTER on his excavations at Gezer, which were stopped in November by an outbreak of cholera. The work has centred about the megalithic temple, and the results are important. On the rock summit are a series of very ancient troglodyte dwellings, of perhaps 3000-2500 B.C. Above this are five later strata, two Amorite, two pre-exilic, and one just after the exile. During the earlier periods the temple was an open place, containing only a monolith. In the Jewish time it was partially built over, though without loss of its sacred character. The town grew smaller during the period of the monarchy. Very few inscriptions have been found. The temple consists of (1) a row of eight monoliths and two broken stumps of others. One had evidently been held in peculiar veneration, as it had been much polished at the top; (2) a large block of stone with a socket in the top, apparently for the *asherah* pole; (3) an open area of undetermined extent. In the soil which covered the rock during the

Aморite periods were found a number of large jars, each of which contained the skeleton of a new-born child, evidently the victim of sacrifice. A fuller account of the work and its interruption is contained in the *Quarterly Statement* of the Palestine Exploration Fund for January and April, 1903. See also the *London Times*, June 23, 1903, and *Harper's Magazine*, June, 1903.

KAB ELIAS.—The rock sculptures near this place are further described and illustrated by Mrs. GHOSN-EL-HOWIE in *Records of the Past*, II, 1903, pp. 140-144 (3 cuts). See *Am. J. Arch.* VII, 1903, p. 107.

SIDON.—**An Inscription from the Temple of Eshmoun.**—A new Phoenician inscription, almost certainly from the temple of Eshmoun near Sidon, has been reported by Dr. Schröder of Beyrout. It is of value as showing for the first time the title King of Kings (*Melek-melakim*) in a Semitic inscription, and as furnishing the name of the father of Bodastoret, Siddykjaton. Why he should bear this new title is wholly uncertain. This gives a list of six kings of Sidon, Esmounazar I, Tabnit, Ummastoret, Esmounazar II, Siddykjaton, Bodastoret, but whether they ruled before or after Alexander is still uncertain. (P. BERGER, in *C. R. Acad. Insc.* 1903, pp. 154-159.) *Ibid.* pp. 163-164, CLERMONT GANNEAU publishes a note on the new title and name in the inscription. *Ibid.* pp. 166-167, a discussion by ROUVIER is announced and a photograph reproduced.

ASIA MINOR

COS.—**The Excavations of 1902.**—The generously endowed expedition to Cos has had great success in its four months' work in 1902. The most important ancient and mediaeval sites on the island outside of the capital were studied. These are the sanctuary of Isthmos, possibly the original capital, where there is a fifth-century temple dedicated to Demeter; the sanctuary of Apollo at Halasarna, an Hellenistic white marble Doric temple, which was replaced not later than A.D. 450 by one of the most imposing of early Byzantine churches; and four strongholds of the Knights of St. John, who occupied the island in the fourteenth and fifteenth centuries. But the great achievement, due to the suggestion of W. R. Paton, was the discovery and partial excavation of the famous Asclepium. This lies at the foot of the hills about two miles west of the city, and already the great Doric temple dating from the beginning of the second century B.C., an earlier and much smaller Ionic temple *in antis* from perhaps the end of the fifth century, an elaborate altar-building resembling the Great Altar at Pergamon, which is the scene of the fourth mime of Herondas, and traces of a still earlier Doric poros temple, have been found. There is little but fragmentary sculpture. Inscriptions throw much light on the history of the sanctuary. Apparently it was controlled by a school of genuinely scientific physicians, whose skill was well known abroad as early as the third century B.C. Further excavation is needed for the comparison with Epidaurus, which the extent and splendor of this establishment demand. (R. HERZOG, *Arch. Anz.* 1903, pp. 1-13; 4 cuts.)

CYZICUS.—**Inscriptions.**—In *J.H.S.* XXIII, 1903, pp. 75-91, F. W. HASLUCK gives forty Greek inscriptions from Cyzicus, with photographs of some of the stones. They are largely post-Christian and with Latin names. Apollo, who seems to be the local representative of the Phrygian

sun-god, was the patron god of Cyzicus, and his temple was shared with Asclepius on the introduction of the latter from Pergamon. The genealogy of three generations of a family of Asclepiadae is here worked out.

ISAURIA AND PAMPHYLIA.—**Explorations in 1902.**—A joint German-Bohemian expedition to Asia Minor in the spring of 1902 made extensive exploration of the little-visited region west and south of Iconium, studying especially the ancient settlement of the country, following new roads across the Taurus, correcting the map, and noting a large number of inscriptions and sculptures. Special points were Fasiler, with its colossal Hittite statue and a necropolis; Palono-Isaura, the ancient capital, the remains of which are extensive and important; the site of Vasada, determined by an inscription; Amblada, where an inscribed letter from a Pergamene king to the city was found; and an unknown ancient site with aqueduct and buildings standing, not far from the southern coast. The country in this direction was difficult but very picturesque. (H. SWOBODA, *Arch. Anz.* 1902, pp. 160-162.)

KIDROS.—**Inscription.**—*B.C.H.* XXVI, 1902, pp. 286-287, contains an inscription from Kidros, on the Black Sea between Amasa and Djiddé, copied by Catelin and published with notes by G. MENDEL. It is a dedication to the θεός αἰώνιος, and is dated according to the Bithynian calendar and Pompeian era, corresponding to February 21, 115 A.D. The maker of the vow was Sextus Vibius Gallus, known from an important inscription of Anastasis. (*C.I.L.* III, 454, Suppl. 6984.)

KONIA.—**Monuments in the Museum.**—*B.C.H.* XXVI, 1902, pp. 209-246 (11 cuts), contains a classified description of the museum at Konia by G. MENDEL. Twelve inscriptions are published, one of which is in Latin, but none seem of special importance. Six sculptures in the round, all badly mutilated, are briefly described, and more fully five votive reliefs and fifteen funeral monuments, of which ten are inscribed. Noteworthy is a relief representing the god Sozon, nude, with a lyre in the left hand, and beside him a serpent on a bucranium. Reliefs hitherto have only shown the god on horseback, but analogous types are found on the coins of Mastaura, Thyatira, and Germa. Among the four bronzes is a nude Hermes with a purse in his right hand and a feather or leaf on his head. An appendix describes the great sarcophagus found at Ambar-arassy and already noticed by RAMSAY. (*Revue des Etudes Anciennes*, 1901; cf. *Am. J. Arch.* VI, 1902, p. 202.) On the front in a central niche the deceased is seated, reading; in similar niches on the right and left, the Dioscuri. The back and right side represent hunting scenes, with games on a small frieze below. The left side shows a funeral offering before the door of the tomb; and below, a frieze showing three labors of Heracles performed by Eros. The cover shows the funeral couch occupied by the man and wife. There is added a full discussion of this type of sarcophagus, in which it is claimed, in opposition to STRZYGOWSKI (*Orient oder Rom*), that the characteristics are not sufficiently specific to require the reference of all these monuments, found in Asia Minor, Greece, and Italy, to a single centre, and that even if this were proved, it would not support the thesis of Strzygowski, for it is impossible to connect them with a purely Greek artistic tradition. This does not necessarily affect his main position as to the origin and development of Christian art.

LIBYSSA.—**The Tomb of Hannibal.**—In *Athen. Mith.* XXVII, 1902, pp. 321-326 (pl.; 4 cuts), T. WIEGAND seeks to identify the site of the ancient Libyssa, where, according to Tzetzes, Septimius Severus marked the tomb of Hannibal by a marble monument. The ancient town did not lie in the valley of the Dil (Libyssus) by the modern Dil-Eskelessi, east of the promontory, Kaaba-burun, but farther to the west, along the shore at the foot of the hill, Handschir-bair, where are considerable remains, some of which may well mark the monument of Severus.

MILETUS.—**Excavations during 1901-02.**—The second year's work of the German excavations at Miletus (1901-02) has been abundantly productive. The city walls show four periods earlier than the much reduced Byzantine circuit: (1) early Hellenistic; (2) late Hellenistic, a very strong wall; (3) of the time of Trajan; (4) of the time of Gallienus, when, in A.D. 265, a somewhat reduced area was hastily defended from the Goths. Among the burial monuments found outside the city in the direction of Didyma, a very beautiful little Hellenistic Doric building can be entirely restored. In the necropolis some archaic sculpture has been found, but no undisturbed grave of that period. Within the city the important Nymphaeum at the end of the aqueduct has been thoroughly recovered, both in its mechanical construction and in its decorative features. The town-house, too, with propylaeum, large enclosed court, great altar, and covered assembly-hall can be entirely restored. An area of about half the ancient site, including the theatre and all other important points, has been bought outright for the purposes of exploration. (TH. WIEGAND, *Arch. Anz.* 1902, pp. 147-155; pl.; 11 cuts.)

MYRINA.—**A Terra-cotta Group.**—In *R. Arch.* I, 1903, pp. 205-212 (pl.; cut), S. REINACH publishes 'Aphrodite and Eros; a Group from Myrina in the Museum at Athens.' The group represents Aphrodite threatening with her sandal a diminutive Eros, who crouches before her in supplication. The group is of value as throwing light on other representations of Aphrodite with a sandal, wand, or garland. It is clear that she is threatening Ares, or Eros. The article contains a review of previous discussions of these other figures.

PERGAMUM.—**The Visits of Cyriacus.**—Cyriacus of Ancona visited Pergamum in 1431 and in 1444, but few of the *pleraque epigrammata* which he copied have survived. One is *C.I.L.* III, 399, another the note of Apianus, *Pergami reperitur haec columna opus Niceati*, and a third seems hidden in the Latin of Codex Parmensis (fol. 60^v). It is a translation of a decree in honor of L. Cuspius Pactumeius Rufinus, known through two other Pergamene inscriptions. (E. ZIEBARTH, *Athen. Mith.* XXVII, 1902, pp. 445-446.)

RHODES.—**Excavations at Lindos.**—In *Athen.* June 13, 1903, is a summary of the report of the Danish archaeologists, Drs. Blinkenberg and Kinch, on their first season's work at Lindos. The excavations were confined to the higher part of the Acropolis, where the Propylaea and temple of Athena were laid bare. The latter was Doric and apparently built about 400 B.C. Fragments of statues and inscribed bases, many with artists' signatures, were found. Other inscriptions are also of importance, particularly two long laws relating to the management of the temple property and the right of entry and sacrilege. There is also a list of about 150 officials and

priests of Lindos. A crevice near the temple yielded a mass of terra-cottas and vase fragments, remains of ex-votos, which had been thrown away when the temple became overfilled. Many objects imported from the East were found, recalling Herodotus's statement that Amasis bestowed rich gifts on the temple.

MT. TMOLUS.—**Discovery of Ancient Gold Mines.**—Two engineers of Smyrna, Catalanos and Axiotakis, report the discovery of the ancient gold mines at Mt. Tmolus. They have found, about four hundred metres from the Pactolus, a vein of quartz which seems to have been worked in antiquity. At the end of the vein were remains of ancient structures and traces of a conduit leading to a tributary of the Pactolus. (*C. R. Acad. Insc.* 1903, pp. 73-74.)

TRALLES.—**Excavations in 1902.**—The excavations at Tralles, begun in 1901, have been continued by Edhem Bey. He has excavated a fine marble portico with monolithic columns in colored marbles which had been later altered into a Byzantine church. Many inscriptions have been discovered and numerous fragments of marble statues, among which are three good heads. (*C. R. Acad. Insc.* 1903, pp. 78-79.)

VARIOUS INSCRIPTIONS.—In *B.C.H.* XXV, 1901, pp. 325-336, A. BESSET publishes thirty-two inscriptions from Asia Minor. Two are from the European side of the Sea of Marmora, three from Bithynia, one from Mysia, twenty-two from Phrygia, three from Galatia, and one from Lydia. Some of these are taken from a pamphlet of Meliopoulos and from *Ταχυρόπουλος*, a daily paper of Constantinople. One is in elegiacs and one in Latin. They are for the most part sepulchral and of ordinary types. Of some interest is a group of nine dedications to *Potamos* by a certain Manes and his family, who came from Attalia in Lydia, though the provenience of the inscriptions is not certain. They are now in the railway station of Haidar-Pasha in Phrygia.

Athen. Mith. XXVII, 1902, pp. 267-268, contains eight inscriptions from Bithynia, found at Chalcedon, Drepanon, Sabanja, and Ak-shehr. Four are funerary, two honorary, one votive, and one merely cabalistic signs. Two are accompanied by reliefs. In *Ibid.*, pp. 269-270, are published two fragmentary inscriptions from Alabanda and one from Lagina. *Ibid.*, pp. 270-271, contains five inscriptions from Phrygia. Four are mortuary, the fifth a mere fragment. They are from Philomelion, Laodicea on the Lycos, Ildja, and Arab-ören. *Ibid.*, p. 269, contains two inscriptions from Smyrna. One is a dedication to the Tyche of the Thessalonians, the other the gravestone of the father and brother of Apollas. (See *B.C.H.* 1887, p. 297.) In the same place are republished from the *Ἀπορία* of Smyrna two inscriptions of Thyatira, one honorary, the other sepulchral.

THRACE AND MACEDONIA

ANCIENT REMAINS IN EASTERN THRACE.—In *Jh. Oesterr. Arch.* I. VI, *Beiblatt*, col. 63-66 (2 cuts), F. SCHAEFFER reports some archaeological observations made on a geological trip in the district east of Adrianople between the railroad and the Black Sea, which is very seldom visited. Ancient remains and inscriptions are said to be frequently found at Tirnovó. Thirty kilometers south of the Bay of Iniada, on a rocky promontory, lay the ancient Midia, probably the later name of Salmydessos. The fortifica-

tions on the land side are well preserved. Near by is a chapel of St. Nicholas in front of a cave, which, by its decorations and sculptures, seems to have been long a centre of worship, even in pre-Christian times.

BULGARIA.—**Tumuli in the Toundja Valley.**—*C. R. Acad. Insc.* 1903, pp. 81–87, contains a report by M. COLLIGNON on the excavations of Degrand in the valley of the Toundja (Tonsus) near Yamboli in Bulgaria. In 1901 and 1902 two tumuli were explored, one at Tell Ratcheff, the other at Metchkur. At each a necropolis was found, in which the dead were interred, after burning, under small hillocks about which were placed vases and other funeral offerings. Implements of stone and a few of bronze were found, as well as rude figures in terra-cotta and much pottery. These objects, and especially the vases and terra-cottas, showed strong resemblances to those from Hissarlik, Cyprus, and Yortan in Mysia. As yet the date of these burials cannot be determined, and it is very possible that this primitive civilization continued longer in Thrace than in the Troad or Cyprus.

CONSTANTINOPLE.—**Syrian Bronzes in the Museum.**—In *R. Arch.* I, 1903, pp. 392–400 (2 cuts), P. PERDRIZET publishes the third instalment of 'Syriaca.' (See *R. Arch.* 1898, I, p. 34; 1899, II, p. 34.) § 13 treats of a bronze from Antioch in the Ottoman Museum. It represents a beardless Hermes victorious over a youthful adversary. Between the wings on the head of Hermes is a lotus leaf, an Egyptian symbol of victory. This interpretation of Förster (*Jb. Arch. I.* 1898, pp. 177–183; 1901, pp. 39–53) is defended by the analogy of a head from Carthage in the Museum of Algiers. This head is an Antinous or Serapis. Other examples of the bronze group are cited, and it is claimed that they are derived from a celebrated work, probably in Alexandria. § 14 deals with a curious bronze Syrian idol of very early date in the museum at Constantinople. It rests on a triangular base supported by three feet. The image is flat, and recalls the clay Mycenaean idols. The head wears a conical cap surrounded by seven rays. In spite of some superficial resemblances, nothing warrants any connection between this figure and Mycenaean or early Greek works. All such images are merely modifications of the primitive triangular type in the representation of the human form. This work belongs in the Hittite period, and shows neither Assyrian nor Egyptian influence.

KISTANJE.—**Roman Gravestones.**—In May, 1903, there were discovered in Kistanje (Burnum) three gravestones of soldiers of the eleventh legion. Two of these are published, with illustrations, by H. LIEBL in *Jh. Oesterr. Arch. I.* VI, 1903, *Beiblatt*, col. 85–86. The third contained also a relief representing a case of surgical instruments, and has been described in *Wiener Studien*, XXIV, p. 149.

MACEDONIA.—**Inscriptions.**—In *Athen. Mitth.* XXVII, 1902, pp. 305–320, A. STRUCK publishes fifty inscriptions from Macedonia. Of these, six are mere fragments, one a list of names, four votive (two of these are Christian), thirty-four mortuary, and five Latin (one a dedication). Seventeen are from Mygdonia, including eleven from Thessalonica; twenty from Emathia, including ten from Aegae, and nine from Beroea; two from Siatista in Elimeia, and eleven from Paconia. None seem of any special importance.

SERVIA.—**Inscriptions and Monuments.**—*Jh. Oesterr. Arch. I.* VI, 1903, *Beiblatt*, col. 1–60 (7 cuts), contains another report by A. VON PREMIER-

STEIN and N. VULIĆ on ancient monuments observed during a tour in Serbia and Macedonia. The article contains ninety-nine inscriptions, of which sixteen are Greek, the rest Latin. They were collected in Macedonia (Bylazora and Stobi), Moesia superior, and the Dalmatian-Moesian border near Guberevci. Among the few pieces of sculpture described are a relief at Stobi of a standing female figure between two horsemen, commonly called Helena and the Dioscuri, and another at Viminacium representing the evil eye attacked by beasts and birds.

THRACIAN INSCRIPTIONS.—In *B.C.H.* XXV, 1901, pp. 308-324, G. SEURE continues his '*Voyage en Thrace*' by publishing twenty-seven sepulchral inscriptions from various places. Two of these are metrical, and six are in Latin.

GREECE

GREEK ARCHAEOLOGICAL SOCIETY.—Annual Meeting.

A general meeting of the Greek Archaeological Society, under the presidency of the Crown Prince, was held on January 25 (February 6), 1903. The Ephor-General, Cavvadias, reported on the work of the Society during the year 1902, dwelling especially upon the expectations and results of the excavations at Samos. (See *Am. J. Arch.* VII, 1903, p. 111.) The temple had a double row of twenty-four columns on the sides, and a triple row of either twelve or ten across the front. The architecture shows many peculiarities. The Society has also been at work at Olympia, Eleusis, Sunium, Thessaly, Thermon, Chaeronea, Euboea, and Arcadia. The proposed restoration of the Temple of Apollo at Phigalia, the Lion of Chaeronea, and the north porch of the Erechtheum were described. New museums have been opened at Chalcis, Thera, Myconos, and Nauplia, and much done for the preservation of the monuments scattered through the kingdom. (Νέον Ἀσπύ, January 26, 1903.)

ACARNANIA.—**Inscriptions.**—In *Athen. Mith.* XXVII, 1902, pp. 330-352, E. PREUXER publishes twenty-four new inscriptions from Acarnania, and adds notes and corrections to those already published in *C.I.G.S.* III. Of these four are fragments, from Astacus, Phyrreum, and Komboti; from Palairos are fifteen gravestones with a single name, two being fragments in archaic character, two votive bases, but without the name of the divinity, and one list of names belonging apparently to some private religious association. The larger part of the article is concerned with two metrical epitaphs from Thyrrum. One, of eight lines, commemorates a certain Sosipolis, who fell in battle; the other Timelas, who was killed by a bear. Two other metrical epitaphs from the same place (*C.I.G.S.* III, 489, and *Athen. Mith.* XXV, 1900, p. 113) are also discussed.

AMORGOS.—**Defixiones.**—In *B.C.H.* XXV, 1901, pp. 412-456, T. HOMOLLE publishes the inscriptions on two lead plates discovered near Arkesine on Amorgos in June, 1899. Both belong to the *devotiones* or *defixiones*: the first is addressed to Demeter and contains a curse against a certain Epaphroditus who has caused the suppliant's slaves to run away, and stirred up hatred against him. It cannot well be earlier than the second century of our era. The other is an exorcism against a malignant tumor, and is full of Jewish-Christian formulae. It is evidently intended to be worn as an amulet by any person of either sex. There is a full commentary on the character of the exorcism and the terms employed. The two tablets show


the continuance of the ancient practices even in Christian times. Lead plates with Christian formulae are rare, but this seems a clear case, and if it is the work of a heretic, the heresy is well concealed. The date is perhaps the third century after Christ. References are given to similar beliefs and charms in the folklore of modern Greece.

ARGOS. — Excavations. — The Dutch excavations on the hill Aspis, just north of Argos, have disclosed a very early ring-wall resting on solid rock, with one-room houses within, all built of small unhewn stones laid without mortar. The pottery, all pre-Mycenaean, shows six or seven distinct varieties, beginning with hand-polished ware. A second and larger area, enclosed by a Cyclopean wall, has three strata, two prehistoric and one Greek. Two towers and a piece of wall in polygonal masonry adjoin it. The foundations of part of the Cyclopean wall are followed by the fortifications of classic times. The Mycenaean necropolis is between Aspis and Larissa; a few late graves show cremation. The site of the temple of the Pythian Apollo and the neighboring stadium are on the south side of Aspis. (February meeting of Berlin Archaeological Society. *Arch. Anz.* 1903, pp. 44-45.) See *Am. J. Arch.* VII, 1903, p. 114.

ATHENS. — A Fragment of the Eleusinian Decree. — The National Museum at Athens contains a small fragment of the Athenian copy of the Eleusinian decree (*C.I.A.* IV, 1, p. 59, 26 b; Dittenberger, *Syll.* 20), containing a part of lines 15-20. The two stones seem to have been of exactly the same size, and the letters are identical in form, size, and spacing. The two copies did not agree absolutely, however, for in only the second, third, and fourth lines of the fragment do the letters appear in the same vertical columns as on the complete stone. It shows clearly how little importance the ancients attached to an exact agreement in unessentials. The bearing of this on the text of Thucydides V, 47, as given in the manuscripts is obvious. The character of the writing in this fragment agrees best with the dates assigned to the Eleusinian decree by Körte and Ziehen (418 B.C. or 423 B.C.). The nearest analogy is found in the writing of *C.I.A.* I, 260, of the year 420 B.C. (A. WILHELM, *Jh. Oesterr. Arch. I.* VI, 1903, pp. 10-15; 2 cuts.)

A Prehistoric Tomb. — In 'Εφ. 'Αρχ. 1902, 124-130 (4 cuts), A. N. SKIAS publishes an account of a prehistoric tomb found on the south slope of the Acropolis between the Odeum and the Asclepieum. The tomb contained six bodies, two below and four above. One certainly, and the other probably, were buried in the contracted position common on the Cyclades. All seem to have been buried about the same time, and the presence of several arrow-heads of stone makes it probable that they fell in battle. A little jug of hand-made ware and some fragments of primitive pottery were also found.

Portraits of Aeschylus and Chrysippus. — *Athen. Mith.* XXVII, 1902, pp. 294-300 (cut), contains two notes on Greek iconography by H. von Prott. (1) The statue of Aeschylus in the Theatre at Athens is mentioned by Pausanias (I, 21) in a way which seems to distinguish it from those of Sophocles and Euripides. The latter are probably the statues set up by Lycurgus, the former is a pendant to that of Thespis (*C.I.A.* III, 940) set up in Roman times. This is shown by a fragment in the epigraphical museum at Athens, corresponding in material, size, and writing to the Thespis

inscription and containing the letters  ΚΥΛΟΣ. (2) The National Museum at Athens contains a small bust, without the head, bearing the inscription τὸν Χρ[ύ]σιππον | Ἀκρίσιος | Μάθη. Though the head is gone, the arrangement of the drapery and the evident position of the head confirm the identification of the so-called Poseidonius of the Louvre with the statue of Chrysippus in the Ceramicus, and of the bald-headed old man on the coins of Soli with the Stoic philosopher rather than with Aratus, who is probably shown on the coins as a bearded man wrapped in a mantle.

Tombstone of a Priestess.—In Ἑφ. Ἀρχ. 1902, 143-144, Miss S. B. FRANKLIN describes a small column in the National Museum at Athens. Its exact provenience is unknown, but it marked the grave of a certain Μαλθάκη, and bears in relief the representation of a temple key. It is the fourth column with this symbol in Attica. The inscription is plainly pre-Roman.

Reproductions of Sculptures in the Acropolis Museum.—Miss Ingrid-Kjern, a Danish sculptor, has made plaster copies, with accurate reproduction of the colors, of one of the κόραι of the Acropolis, and of the fine head of an ephelus in the same museum. Reproductions are for sale. (*R. Arch.* I, 1903, pp. 75-76.)

BOEOTIA.—**Inscriptions.**—In *B.C.H.* XXV, 1901, pp. 359-378, W. VOLLGRAF publishes twenty inscriptions from Boeotia. The first two are manumissions from Thespieae in the Boeotian dialect. The next fifteen are from Thebes, and are for the most part single names from gravestones. One is a corrected copy of *C.I.G.S.* I, 2552, and reads *ἡμῶν | Γᾶς Μακαίρας Τελεσφόρου*. The last three are from Livadia, and two of these are thought by T. H. to belong together. A part of this inscription has been published in *C.I.G.S.* I, 3078. It was erected by the Agonothetes, Xenarchus, after the Basileia, between 221 and 216 B.C., and contains not only the record of victors but the accounts of the Agonothetes, and the record of a fine imposed on a previous officer for carelessness or delay in his accounts. Such a document as this ἀπολογία of Xenarchus is unique.

CHAERONEA.—According to the *Vossische Zeitung*, Soteriades has discovered about 2 km. east of Chaeronea at a depth of 7 m. the remains of a huge funeral pile, upwards of 70 m. in circumference. The remains consist of ashes, bones, spear-heads, swords, and daggers, as well as *κάνθαροι* of the fourth century and other fragments of pottery. (From *Wochenschrift für klass. Philologie*, 1903, col. 334-335.)

CRETE.—**CANDIA.**—**A Grave-relief of the Fifth Century.**—O. BENNDORF publishes in *Jh. Oesterr. Arch.* I, VI, 1903, pp. 1-9 (pl.; 8 cuts), a stele in the museum at Candia. Only the upper part is preserved containing the head and shoulders of a youth, with a quiver on his back. The size of the stele and the modelling of the body indicate that he was seated, probably on a rock. The work is of the Periclean age and of the most delicate and painstaking execution. The head is of the same type as the *Idolino*, but has a certain softness which connects it in feeling with the Ionic art, as it appears in the reliefs of Philis from Thasos and the youth from Pella, or in the youths of the Lycian sarcophagus from Sidon, as contrasted with those of the Parthenon frieze. This agrees with the character of the Cretan coins, in which the temper of the pre-Dorian art of the islands continues to exist. Nothing hinders regarding the stele as the work of a Cretan artist; it is certainly contemporary with Cresilas. An illustrated catalogue of the mar-

ble sculptures in Candia is in preparation by L. Savignoni. In *Revue des Études Anciennes*, V, 1903, pp. 120-123 (pl.: cut), P. PERDRIZET publishes the same stele. The youth was represented as a hunter, for he carried the bow, but heroized, for he did not wear the hunter's tunic. The style indicates that it was made about 400 B.C. and under Polyclitan rather than Phidian influence. It shows a strong resemblance to the Dresden athlete and the Idolino.

CRETE. — CNOSSUS. — Excavations in 1903. — In a long letter to the *London Times*, June 5, 1903, A. J. EVANS describes his season's work at Cnossus. At the north side of the northwest court of the palace a double flight of steps, at right angles to one another and with a square bastion projecting between, led down to a square area, originally paved with cement. It seems clear that they did not lead to any megaron nor did they form a direct approach to the palace from this side. The steps and bastion would accommodate about five hundred spectators. It is scarcely likely that the space was used for bull-fights, but it may have been used for dances or pugilistic encounters, such as are shown in contemporary art. Between this area and the west court of the palace is a collection of small, irregular rooms, whose foundations belong to the "Minoan Middle Period." Possibly they formed an early shrine and its dependencies, and hence were preserved when the later palace was built. Among other fine objects found here was a deposit of bronze vessels decorated in relief, of a technique and beauty superior to any of those found at Mycenae. They belong to the latest period of the palace. In the "magazines," thirty more cists were found beneath the long gallery, and in one the remains of a wooden chest, which had been covered with a mosaic of porcelain and crystal plaques. The wood work and porcelain had been also covered with gold-leaf. Near the chest was a large bronze handle. The earlier strata show a long course of civilization before the late Minoan period of the present palace, which is not later than the sixteenth century B.C. The objects of the Hyksos period and the twelfth dynasty take us back at least to the beginning of the second millennium B.C. In some ways, especially in the ceramic ware, these earlier days were the more brilliant. The prehistoric houses outside the palace were examined, and a miniature palace excavated. The plan of the whole upper story, which was reached by two staircases, can be easily seen. The building shows uniformity of structure, and the architectural style of the later palace period in its purer form. The walls are seldom of rubble, but more often of large gypsum blocks covered with a thin coat of painted plaster. One room with a monolith in the centre shows the sockets in the wall for the beams which sustained the floor above. The megaron has at the inner end a raised balustrade supporting two columns, between which three steps ascend to a square niche containing the remains of a gypsum seat or throne. The whole bears an extraordinary resemblance to the later basilica. It is probable that the building was a royal villa, for which its situation in a cool valley near a stream is very suitable.

In the *Times*, June 10, 1903, G. A. MACMILLAN publishes a telegram from A. J. EVANS, reporting "a discovery of extraordinary interest" at the close of the season. The excavation of a depression in the basement of the shrine off the central court uncovered two large walled depositaries containing cult objects and decorative furniture belonging to the sanctuary. These were largely of native porcelain, including vases, inlays, and small reliefs of

great spirit. More important is a series of porcelain figures, about 1 foot in height, representing the goddess and her votaries. The goddess is represented with snakes coiled about her hair and forming her zone; she holds them out by their necks. Her form is finely modelled, and every detail of the embroidered dress is reproduced, even to the lacing of the bodice. The remains of a chest, with crystal inlays lined with gold foil, and a hoard of seal impressions from lost documents were also found. Some of the sealings were inscribed with linear script, while others contain representations of a god and goddess accompanied by lions.

CRETE. — GOULAS. — Topography. — In *B.C.H.* XXV, 1901, pp. 282-307 (2 pls.; 6 cuts), J. DEMARGUE begins the publication of the results of the excavations at Goulas in Crete in 1899 and 1900. This paper contains a full description of the topography of the region and a detailed description of the site. The remains seem to show that the city was built according to a definite plan, and underwent but few modifications. There is an absence of fine buildings, though there is some difference between the private houses. Ordinarily these consist of a front court and two connecting rooms on the ground-floor, though they may have had an upper story. The roofs seem to have been generally flat, though in some cases they were tiled. The excavations and a prolonged examination did not confirm the view that this was a Mycenaean city, as only four possible Mycenaean objects were found. It seems to have been a city of the archaic Greek epoch, which continued to exist until perhaps the second century B.C., preserving its ancient traditions. An inscription of the third century B.C. shows that it was the ancient Lato. Later articles will give a detailed description of the discoveries.

CRETE. — HAGIA TRIADA. — Italian Excavations in 1903. — According to the *Kölnische Zeitung*, the Italians at Hagia Triada (Herakleion), near Phaestos, have continued the excavation of the small Mycenaean palace, which has been found to contain *megara* for men and women, baths, and storerooms, but no cisterns nor conduits. The two staircases, which led to the upper rooms, are only partially preserved. The small objects found include two hundred clay seals and twenty tablets with Cretan script, as well as bronze kettles and figures of women and animals, a steatite vase, with relief decoration representing Mycenaean warriors, and nineteen talents of bronze, i.e. quadrangular bronze plates, each weighing about 1283 gr. (*Wochenschrift für klass. Philologie*, 1903, col. 588-589. See also *London Times*, May 4, 1903.)

CRETE. — PHAESTOS. — Italian Excavations in 1902. — In *Rend. Acc. Lincei*, XI, 1902, pp. 512-536 (2 plans), L. PERNIER presents a summary report of the excavations in the palace of the third acropolis from February to May, 1902. The work comprised the excavation of the untouched portions of the palace to the west of the great court, at the north-east corner of the hill and north of the women's quarters, and also a careful study and restoration (so far as needful) of the part uncovered previously. The new portions showed decided similarity to the Mycenaean palaces already known, and especially to some of the arrangements at Cnossus. Excavations beneath the surface of the Mycenaean palace brought to light here also evidences of earlier structures with fragments of monochrome and Kamareos pottery. Detailed reports are to appear in *Mon. Ant.*

CRETE.—**The Recent Excavations.**—In the *Nation*, June 11 and 18, 1903, are two interesting letters by R. B. RICHARDSON, describing the recent discoveries at Chossus, Hagia Triada, and Phaestos and the museum at Candia (Herakleion).

DELOS.—**Renewal of Excavations.**—The Duc de Loubat, who has given largely to further the progress of American archaeology, has, since becoming a Corresponding Member of the Académie des Inscriptions et Belles-Lettres, shown interest in classical archaeology also. Through the late president, G. Perrot, he has recently given 50,000 francs, which is to be used for new excavations at Delos, under the direction of T. Homolle. (*C. R. Acad. Insc.* 1903, pp. 178-179.)

DELPHI.—**Opening of the Museum.**—On May 2, 1903, the new Syngros Museum at Delphi was formally transferred to the Greek Government by T. Homolle, the Director of the French School at Athens. Speeches were made by Messrs. Mavromichalis, Minister of Education and the Fine Arts; Homolle; Cavvadias, Ephor-General of Antiquities; Chaumié, the French Minister of Public Instruction; and several others. In the theatre dances were performed, and athletic contests held in the stadium. An interesting summary of the French work at Delphi and a description of the exercises are given by DEMETRIUS KALOPOTHAKES in the *Nation*, May 28, 1903.

EUBOEAE.—**Inscriptions.**—'Εφ. 'Αρχ. 1902, col. 97-123, contains Euboean inscriptions published by G. A. PAPABASILEIOS. The first is the most important, being a decree of the Eretrians providing for the proper celebration of the Artemisia. Musical contests are instituted, and the prizes for each contest fixed. There are also regulations for the sacrifices and the procession. This decree was also published in 'Αθήνα, XIV, 1902, pp. 357-363, by I. D. PHOKITES, and his text, which differs somewhat from that in 'Εφ. 'Αρχ., is reprinted in the *Wochenschrift für klass. Philologie*, 1903, col. 328-329. The decree cannot be far from the end of the fifth century B.C., and shows incomplete use of the Ionic alphabet. Two other inscriptions, also found in Aulonarion, are fragments of lists of victors. Forty-four inscriptions from the Museum at Chalcis are also published. Most of them are funerary and very brief. One, inscribed under and around the foot of a little cantharus, reads δαίτῳι ἀτέλεστα γίνεσθαι τὰ γυθῖα | καὶ πάντα τὰ τε ὄντα καὶ ἅ τι ἐλπίσαι. | πάντα τὰ γυθῖα ἀμήχανα κάτορα αὐτῶι. The article concludes with six short inscriptions from Eretria and five from Vathy.

ITHACA.—**Inscriptions.**—In *Athen. Mith.* XXVII, 1902, pp. 372-376, E. PREUXER publishes corrections and additions to the inscriptions from Ithaca in *C.I.G.S.* III, from an article by JOHN LEE, 'Antiquarian Researches in the Ionian Islands in the Year 1812.' (*Archæologia*, XXXIII, 1849, pp. 36-54; 2 pls.) No. 656 is thus clearly shown to be a modern addition to the golden band. Four new sepulchral inscriptions are added to those in the *Corpus*, and it is shown that Nos. 626 and 627 are from Same, not Ithaca. On pp. 377-378, H. VON PROTTE adds twelve unpublished sepulchral inscriptions and brick stamps from Ithaca. None seem of importance.

LEUCAS.—**Inscriptions.**—*Athen. Mith.* XXVII, 1902, pp. 353-367, contains 'Inscriptions from Leucas,' by E. PREUXER. The greater part of

the article is given to corrections and additions from the *Συλλογὴ τῶν Λευκαδίων Ἐπιγραφῶν* of I. N. STAMATELOS to the inscriptions in *C.I.G.S.* III, 531-599, 989-990. It is shown that 540 and 989 are in all probability forgeries of Petrizzopoulos. In conclusion are published six new inscriptions collected during the Dörpfeld-Goekoop excavations in 1901. Five of these are mere names or letters, but the sixth is an inscription in the Corinthian alphabet of the first half of the sixth century, *Εὐφραῖος μ' ἀνέθηκε τὰθάνα.* It is engraved on the bronze crest of a helmet, which once belonged to a statuette of Athena. It is said to have been found at Sto Gulá, a small plateau in the mountains, where, however, excavations yielded nothing of value beyond confirmation of the existence of a lonely sanctuary of Athena. On pp. 368-371, W. KOLBE publishes twenty-five more inscriptions from Leucas, copied in 1902. All are from grave stelae, and contain only the names and in one case the age of the deceased.

ORCHOMENOS.—*Excavations in 1903.*—According to the *Münchener Allgemeine Zeitung*, the excavations of Furtwängler and Bulle at Orchomenos were directed especially to the discovery of the palace and town of the Minyae, and were completely successful. On a terrace above the spring of the Charites, Akidalia, were found the remains of a large palace of the best Mycenaean period, the walls of which had been decorated with paintings on stucco, consisting partly of ornamental patterns and partly of human figures at rest or in violent activity. Many vases were found, including a large 'Bügelkanne' with a painted inscription in Cretan characters. Many strata were found below the Mycenaean palace, and in the lower levels circular buildings of crude brick on stone foundations. In the graves of the lower levels the bodies were in the cramped position found in neolithic burials, and the graves were lined with clay slabs. In the upper levels were Mycenaean and "geometric" graves, the latter containing gold ornaments. Many vases and other utensils were found in all the graves. From the classical period is a bronze tablet with an interesting inscription. The objects found cover a period of two thousand years. (*Wochenschrift für klass. Philologie*, 1903, col. 500.)

PAROS.—*The Asclepieum and the Pythium.*—In *Athen. Mitth.* XXVII, 1902, pp. 189-238 (3 pls.; 25 figs.), O. RUBENSOHN publishes his third report on Paros, containing the description of the Pythium and Asclepieum. Both sanctuaries lie on terraces near a bay west of Paroikia. The lower terrace has been known as the site of the Asclepieum since the time of Cyriacus, but the scanty remains of the Pythium on the terrace above were discovered and identified by Rubensohn. Almost nothing remains except the supporting wall at the back of the lower terrace and traces of two walls, which seem to have been part of the *peribolos* of the Pythium. Probably there was a small temple in the northwest corner and an altar in the centre. The identification is rendered certain by fragmentary inscriptions, including a block with the name *Μακκαῖδης* in characters bearing the closest resemblance to the Archemus basis from Delos. The inscriptions are to appear in *I. G. Ins. V.* Of the Asclepieum also the remains are little more than foundation walls and a few Doric architectural members in the style of the fourth century. The very detailed description shows that there was an early structure on the site, apparently connected with a spring which flows from the rock at the back of the terrace. At a

later period, probably during the fourth century, a new spring was opened near the centre of this rock, the old one closed, and a new sanctuary laid out, apparently consisting of a court containing a large altar, with a colonnade at the rear, and perhaps in front, and rooms at either end, with porticos on the outside. There are no remains of a temple. The inscriptions are summarily noted, and nine published in full. All will appear in *I. G. Ins. V.* A lead nail, with the inscription ΠΥΡ, seems a charm against fire, which is shown by one of the inscriptions to have been much dreaded. Among the sculptures is an 'Apollo' statue of Parian marble; it belongs to the Samo-Naxian group, and most nearly resembles the Apollo of Thera. As the earliest inscription mentioning Asclepius is of the fourth century, Rubensohn concludes that this terrace with its spring was originally sacred to Apollo Pythius, who was replaced at the end of the fifth century by Asclepius and Hygieia.

A Treaty with Thasos. — In *Athen. Mith.* XXVII, 1902, pp. 273-288, O. RUBENSOHN publishes an inscription from Paros containing a treaty between Paros and Thasos. The stone is fragmentary, containing little more than a portion of the oaths of the contracting parties. The character of the writing and the pure Ionic dialect indicate a date not later than the early part of the fourth century. A consideration of the history of the last years of the Peloponnesian War, combined with the scanty indications of the inscription, leads to the conclusion that the treaty is connected with the revolt of the two islands in 411 B.C. The union of the mother city and the colony seems to have been dissolved somewhat later, as they entered the second Athenian league separately. It was renewed later by the democracy, for in an inscription from the Asclepieum the Parian proxeny is conferred upon Κηφισοφών Κεφαλίωνος, Athenian general in 340 and 339 B.C., for services *περὶ τὸν δῆμον τῶν Παρίων καὶ Θασίων*. The close relations of Paros to Athens are shown in another decree in honor of Athenian Amphictyons of the year 341-40. The inscriptions are to appear in *I. G. Ins. V.* 109, 116, 113.

TEGEA. — Excavations in 1900-01. — *B.C.H.* XXV, 1901, pp. 241-281 (6 pls.; 11 cuts), contains a summary report on the excavations at Tegea in 1900-01, by G. MENDEL. The first season was hampered by incomplete expropriation, so that only the foundations at the east end of the temple and a part of the north and south sides have been well cleared; the central portion has not been touched, and the west end only cleared to the upper course of the foundations. The soil to a depth of about 2.50 m. is more or less recent, then comes a narrow layer of black earth rich in bronzes and pottery, all showing geometric or Mycenaean decoration. There is no example of Corinthian or black-figured ware in it. This layer is found inside the temple, and seems to extend some distance toward the north. It indicates probably an open temenos before the first temple attributed by Pausanias to Aleus. There seems evidence for believing that the temple of Scopas was the fourth, not the third, structure on the site. About the temple are many Byzantine walls of considerable size and depth, belonging to a palace or convent. They are built of old material, and their destruction has yielded most of the sculpture found. The foundation walls show the dimensions of the peristyle to have been 50.05 m. × 21.30 m.; the temple proper was 35.45 m. × 11.90 m., and the cella was 26.95 m. long. There was a ramp at the eastern end and another on the northern side, leading

apparently from a well, which perhaps corresponds to the sacred spring. The architectural fragments found are consistent with Pausanias's statement that all three orders were used in the building. A wall outside may confirm Milchhöfer's theory of an Ionic colonnade outside the temple. The style of these fragments resembles that of the great temples of Asia Minor of the end of the fourth century, and indicates that it is through Scopas that the Greek architecture of the fifth century is connected with the Ionian and Carian of the fourth. Nine fragments of sculpture are briefly described, pending a more elaborate study. Six of these are mere fragments, but the seventh is a head of Heracles, showing all the characteristics of the heads already known, though the style is ruder; the eighth is a female torso in a short tunic, which is probably the Atalanta of the east pediment, and the ninth is a female head almost perfectly preserved and of great charm. An appendix enumerates a number of other monuments in private houses or the little museums at Palaea-Episcopi and Piali. Five heads, eight reliefs, including two of Asclepius and Hygieia and one of the Dioscuri, and four capitals of Ionic antae are described. Only three fragmentary inscriptions were found, but thirty-four unpublished inscriptions from the neighborhood are given. Four are in the epichoric alphabet. Noteworthy is $++ = \xi$, otherwise unknown. Most of them are very fragmentary, but one is an epigram from a public monument, probably of about 370-69 B.C., and there are three late metrical epitaphs.

THEBES.—*Stelae with Engraved Decorations.*—In the Museum at Thebes, Vollgraff has discovered three funeral stelae decorated with figures drawn in outline. Two of them are well preserved and show a warrior with helmet and shield, a spear in his right hand and the sheathed sword in his left. One of them is young and wears a flowing chlamys, his helmet is wreathed with laurel, and his shield bears a representation of the conflict of Bellerophon with the Chimaera. These monuments are of the first third of the fourth century B.C. The third stele is fragmentary. (HOMOLLE, *C. R. Acad. Insc.* 1902, pp. 715-716.)

THESPIAE.—*The Monument to the Muses.*—In *B.C.H.* XXVI, 1902, pp. 129-160 (cut), P. JAMOT continues his account of the discoveries at Thespie in 1888-1891 (see *B.C.H.* X, XV, XVIII, XIX), by a discussion of the 'Monument of the Muses in the Grove of Helicon and the Poet Honestus.' To the seven inscriptions from the base of the monument dedicated by the Thespians to the Heliconian Muses (*C.I.G.S.* I, 1797-1799, 1802-1805) he has added two more, belonging to Melpomene and Calliope, and proposes to assign the sixth place to Erato and the seventh to Clio. Nos. 1800 and 1801 of the *Corpus* do not belong to this monument. The dedication and names of the Muses are in the Boeotian dialect, but the distichs by Honestus are naturally Ionic. Honestus seems to be the Corinthian of the Anthology (IX, 216), and as another epigram by him from Thespie is in honor of Julia, daughter of Augustus, his date and that of the monument is approximately fixed. The artist of the monument is unknown. Other inscriptions show this was not the only monument of the kind, and there is nothing to connect it with those described by Pausanias, who at any rate does not give a complete description of the sanctuary. A small marble statue of a Muse of Graeco-Roman work is published. An appendix contains six more inscriptions. One is a dedication of the Thes-

pians to Mnemosyne and the Muses, containing three elegiac couplets in which the Muses are said to sing various aspects of their mother, Mnemosyne. This leads to a discussion of the division of functions among the Muses. Another is the tribute of Honestus to Julia. The last two are bases set up by Philetaerus, son of Eumenes, and Philetaerus, son of Attalus. The latter is identified with the founder of the Pergamene dynasty, the former may be his nephew or a son of Eumenes I, who died before his father. This basis was later used to receive two elegiac couplets by Honestus.

ITALY

INTERNATIONAL CONGRESS OF THE HISTORICAL SCIENCES.

— The *Revue des Études Anciennes*, V, 1903, pp. 192-195, contains a brief summary by G. RADET of the more important topics presented at the Congress at Rome, April 2-9, 1903. Archaeology held a prominent place. G. Boni explained the results of the excavations in the Forum on the ground, and also by an illustrated lecture. Other reports were by P. Orsi on the results of fourteen years' study in southeastern Sicily, with special reference to the deposits of Sicilian, Mycenaean, and Greek pottery, and also on his recent discoveries in Bruttium and Calabria, at Sybaris, the necropolis of Spezzano, and Locri. G. Patroni described the work in Campania and Lucania, especially at Numistrone; Quagliati, the excavations in Apulia; and Savignoni, the discoveries at Norba and Sermoneta in 1901 and 1902, including at the former a necropolis of the iron age, and at the latter four temples of the Roman period. Mengarelli gave an account of the excavations at Conca (Satricum) in Latium, and the researches in Cisalpine Gaul were discussed by Eusebio and Tamarelli. Montelius read an important paper on the relations between Italy and the Scandinavian peninsula from the early bronze age to the Roman period, which he held were continued without interruption by a trade route across Austria. Papers by Orsi and Ghirardini discussed Mycenaean products and influence in Italy. Collignon traced the type of the "Piagenti" from the Mycenaean idols to the Mourners of the Sidon Sarcophagi. Lafaye discussed funeral monuments with representations of dice-playing. Petersen gave the historical results of the interpretation of Trajan's Column. Ashby presented some unpublished drawings of the Via Appia by Carlo Fabruzzi. Strzygowski described some basilicas of Asia Minor with hemispherical vaulting, in a paper on art in Rome, Milan, and Ravenna during the reigns of Diocletian and Constantine. Conway, in discussing the inscription from Praesos discovered by the British School, maintained that it was earlier than 500 B.C., and in an Indo-European language presenting some analogies to Oscan. A general description of the Congress is given in the *Nation*, May 7, 1903.

NEW LAW FOR THE PROTECTION OF ART TREASURES.

— The *London Times*, June 17, 1903, publishes a long letter from its Rome correspondent on the new Italian law for the protection of art treasures. The law is now uniform over the whole of Italy. The export tax is fixed at 5% *ad valorem* for objects valued at less than 5000 lire, and increases by 2% for each additional 5000 lire until the maximum of 20% is reached. Objects belonging to ecclesiastical and public collections are declared inalienable. A catalogue of all objects in public or private collections is to

be made, and those objects which are considered of extreme importance will be declared inalienable. When any object is offered for sale, the government has the right of preëmption on equal conditions with any would-be purchaser. The value of an object for export is estimated by the owner, checked by a government agent, and in case of dispute, determined by arbitrators. The government is given the right to sell or exchange duplicates. Foreign institutions or citizens may now obtain permission to excavate, subject to rules similar to those in force in other countries. The letter discusses further the present unsatisfactory conditions, and, while noting some weak points in the new law, regards it as on the whole a great improvement.

ANCONA.—**Discovery of a Necropolis.**—At Ancona, outside the Porta Cavour, a necropolis of the pre-Roman and Roman periods has been discovered. A detailed description of several tombs and their contents is given by E. BRIZIO in *Not. Scavi*, 1902, pp. 437-463 (34 figs.). The pre-Roman tombs and their contents—swords, fibulae, necklaces, etc.—are of the Novilara type. The Roman tombs indicate in some cases the custom of burial, in others that of cremation. The first are chambers of brick or stone, in two of which were found considerable remains of the funeral couches. These are made of iron rods passing through cylinders of bone, the elevated head and foot of the couch being decorated with projecting heads cut from bone. A coin found in one of these tombs fixes its date approximately in the middle of the second century B.C. Another contained gold earrings of curious design, gold rings, and a gold necklace. The cremation tombs were simply holes containing the funeral urn. The urns were of various types. Remains of an *ustrinum* were discovered. These discoveries are also briefly described from the *Vossische Zeitung* in the *Wochenschrift für Klass. Philologie*, 1903, col. 336.

CORNETO.—**An Early Vase.**—In the Vienna Museum of Antiquities is a small pot of reddish yellow clay from Corneto. On the front is rudely modelled a complete human face, and the vase is also decorated with a dark brown paint. The face is colored, and on the sides are two flying swans. Color is also used on the foot, handle, and rim. Vases with human features are found in Etruscan ware, but other examples are of bucchero clay, and otherwise undecorated. This vase belongs in the period of the post-Corinthian black-figured technique. A similar, but much ruder, vase is in the Vienna *Museum für Kunst und Industrie*. (O. EGGER, *Jh. Oesterr. Arch.* I, VI, 1903, pp. 65-68; 5 cuts.)

FLORENCE.—**The François Vase.**—The missing fragment of the François vase was returned to the Museum on March 1, 1903, by an unknown visitor, who placed it on a marble basin in one of the halls of the Egyptian section, where it was found the next morning by an attendant. It has been replaced in the vase, which is thus restored to its condition before the accident. (L. A. MILANI, *Atene e Roma*, VI, 1903, col. 59.)

PAGANICA.—**Tombs and a Temple.**—At Paganica, tombs have been found, formed of stones which came, as is indicated by an inscription found in the neighborhood, from a temple of Hercules. (N. PERSICHETTI, *Not. Scavi*, 1902, pp. 470-472.)

POMPEII.—**Excavations in 1902.**—At Pompeii, in August, 1902, accumulations from earlier excavations were removed from Reg. VI, Ins.

XVI. With the excavation of this *insula* the excavation of the region will be complete. (R. PARIBENI, *Not. Scavi*, 1902, pp. 468-469.)

Bronze Statuettes.—In *Berl. Phil. W.* 1903, col. 156-158, F. HAUSER describes two bronze statuettes recently found near Pompeii. One is a seated Heracles of the type commonly referred to the Heracles Epitrapezius of Lysippus. It is rather poor Roman work, but very well preserved, lacking neither the little cantharus nor the club. The other has been already published, though poorly, in *Not. Scavi*, 1901, p. 299. It is certainly a Greek original, and represents Hermes standing, with wings on his heels and probably the caduceus in his left hand. His head is wound with bands, such as are found on athlete statues, and he is therefore considered as god of the palaestra. The head, however, is plainly the portrait of a Seleucid, and probably of Antiochus VIII, Grypus. Its value for the history of art lies in its being a work from Antioch in the last years of the second century B.C.

ROME.—Reconstruction of the Marble Plan.—In Rome a new section of the Conservatori Palace has been opened in which the municipality has properly arranged works of art discovered on municipal territory since 1870. The contents are as far as possible arranged topographically, one room containing the objects from the Gardens of Lamia on the Esquiline, another those from the Gardens of Maecenas, and so forth. On the north side of the garden the bare wall has been used for a partial reconstruction of the marble plan of Rome. Of the 1049 fragments, only 167 have as yet been assigned to the proper places. The work has been under the charge of Lanciani, with valuable assistance from Hülsen and others. (R. LANCIANI, *Athen.* 1903, 2, p. 67.) The plan is the work of many hands, and shows differences both in the quality and thickness of the marble blocks and in the execution. While the scale is in general 1:250, the Palatine and Forum show a scale of 1:200. The greater part of the ninth region is now pieced together, from the Saepta Julia to the Island of the Tiber and the Theatre of Marcellus. Another section includes the Temple of Divus Claudius, parts of the Colosseum and the Thermae of Trajan and the Porticus Liviae on the Esquiline. Only the ascent to the Capitol can be recognized, and nothing can be referred with certainty to the Palatine. Only about one-fifteenth of the whole plan has been recovered. (F. BRUNSWICK, *Berl. Phil. W.* 1903, col. 766-767.) The new study of the fragments has resulted in the recognition of the so-called "Divorum," which lay between the Saepta Julia and the Thermae of Agrippa. It was a long rectangle, with eighty columns on the sides and sixteen at the ends, within which was a grove and small altar. It was entered through a large double-gated arch between small chapels. Hülsen considers the full name to have been *Templum Divorum Aedes Divi Vespasiani et Titi*, and the builder to have been Domitian. The Serapeum has also been found near by, and the Isaeum, its continuation. (F. BRUNSWICK, *Berl. Phil. W.* 1903, col. 574-575.)

Excavations near the Forum.—The work in the Forum has been partly given to further investigation of the prehistoric necropolis, partly to repairing the Arch of Severus, and partly to connecting the Forum and the Palatine, in which great progress has been made. The road from the Arch of Titus to the Palatine has been followed further, and remains of build-

ings earlier than the Domus Gaiana have been found. Excavations to the southwest of the temple of Augustus have not as yet yielded much except remains of *tabernae* and of a private house. On the Palatine excavation beyond the northeast end of the Stadium has uncovered some remains of a building, beneath which are large tanks to which water was brought by a branch of the Aqua Claudia. (T. ASHBY, JR., *Cl. R.* XVII, 1903, pp. 136-137.)

In May two more graves were found in the Forum. Both were of young boys, and in each case the body had been enclosed in the hollow trunk of a tree. The usual red and black vases were also found. (L. A. cited in *Wochenschrift für klass. Philologie*, June 3, 1903.) The prehistoric graves found near the Temple of Antoninus and Faustina do not differ essentially from the graves of the Viminal and Esquiline. It is clear that they belong to a people who practised cremation on their first arrival, and subsequently changed this to inhumation. The two methods were not in vogue at the same time. (R. LANCIANI, *Athen.* 1903, 2, p. 68.)

In the excavations between the upper part of the Sacra Via and the Palatine a drain was found which had been repaired in later times with blocks from ruined monuments. Here was found a marble slab containing part of an inscription in honor of Thermantia, mother of the emperor Theodosius, erected apparently by Ceionius Rufius Albinus, *praefectus urbi* from 389-391 A.D. (G. GATTI, *Rend. Acc. Lincei*, XI, 1902, pp. 587-591.)

Mr. Lionel Phillips has made an additional gift of £4000 to the Italian government for the purchase of three more houses bordering on the Forum. This will make possible the complete excavation of the Basilica Aemilia, and the entrance to the Forum of Nerva, as well as a proper display of the Temple of Antoninus and Faustina. (*Athen.* April 18, 1903.)

Excavations at the Piazza Venezia.—The block between the Piazza di Venezia, Macello de' Corvi, Forum of Trajan, Piazza dei SS. Apostoli, and Via Nazionale has been destroyed. This has at once brought to light some interesting objects including a good bust of Didia Clara, daughter of the emperor Didius Julianus (A.D. 198). In the neighborhood seems to have been the house of a senator named Laurentius. (R. LANCIANI, *Athen.* February 7, 1903.) Further excavations between the Piazza di Venezia and the Forum of Trajan have led to the discovery of large foundations of an unknown building, a hoard of worthless fourth-century coins, and some remarkably delicate architectural carvings in marble. Many columns, capitals, stamped bricks, a bronze lamp inlaid with silver, and numerous inscriptions on slabs used in the construction of later buildings have also been found. (R. LANCIANI, *Athen.* 1903, 2, p. 68.)

Monument of Avilius Teres.—In the course of alterations in the Castle of St. Angelo further fragments from the monument of Avilius Teres, the chariot driver of the time of Domitian, came to light. A part of the inscription has long been known. It is now possible to restore about one-half of the text, which was in three parts. First came a list of the victories of Avilius, then the names of the horses he had driven, and lastly a list of his improvements in harnessing, etc., and the names of the vanquished charioteers. (R. LANCIANI, *Athen.* February 7, 1903.)

Various Minor Discoveries.—In the work on the new hospital for convalescents near S. Stefano Rotondo various architectural fragments have come

to light.—The pavement of an ancient street has been found in and near the Piazza Colonna; the direction of an inscribed pipe found here confirms the previous supposition as to the location of the station of the first cohort of the *vigiles*. In the same place architectural fragments and fragmentary sepulchral inscriptions have been found. In *Athen*, February 7, 1903, R. LANCIANI, in reporting this discovery, declines to accept this interpretation of the inscription on the water-pipe, which reads [*sub cura . . .*] *i Phociani trib(uni) e(o)ho(r)is pr(imae) rig(illum)*. He holds that the pipe is connected with a system of hydrants for use against fires, which were under the control of the *cohortes vigillum*.—In the Villa Torlonia, opposite Via Alessandria, remains have been found of a wall of *opus reticulatum*, which belonged to tombs that lined the ancient street; also cinerary urns. (G. GATTI, *Not. Scavi*, 1902, pp. 463-465, 467-468.)—Excavation has been continued in the church of S. Saba on the Aventine. In the right nave, besides the eight sarcophagi already reported, eight tombs have been discovered, and a common trench containing numerous remains of human skeletons; also a large sculptured sarcophagus, a piece of ancient pavement of marble, tufa, and travertine, and remains of walls. (M. E. CANNIZZARO and I. C. GAVINI, *ibid.* pp. 465-466; 2 figs.)

SAN MARZANO AND POGGIOMARINO.—Professors Dall'Osso and Pais, who have been engaged in the archaeological investigations in San Marzano and Poggiomarino on the eastern slope of Mt. Vesuvius, report some exceptionally interesting finds. Among these are the remains of an extensive villa dating from the period of Augustus. This building was found several metres below the present surface, and had been completely covered by fields under cultivation. The excavated portions of the villa show an absolute absence of ashes or lava, and it is clear that they were not destroyed by the eruption. This is new evidence proving the correctness of Pliny's statement, that during the eruption of 79 A.D. a strong south wind blew all the ashes to the north side of the volcano, and that the eastern slope was left perfectly intact. But the special significance of the new find consists in this, that the foundation walls of the villa are separated by a stratum of 1½ metres from a stratum of ashes, beneath which pre-historic tombs were discovered. The ash stratum, then, was the result of an eruption that antedated by hundreds of years the famous destruction in the first century; in the valley of the Sarno are the remains of several villages destroyed by Vesuvius in prehistoric times. Professor Dall'Osso has undertaken extensive diggings to uncover these. (*Nation*, June 25, 1903.)

SARDINIA.—**Primitive Tombs in Cagliari.**—In *B. Paletn. It.* 1902, pp. 195-203 (4 figs.), E. MANNAI and R. LOBBO report the discovery of primitive tombs and stone implements in the province of Cagliari, Sardinia.

SICILY.—**RIVETAZZO.**—**Excavation of a Necropolis.**—In *B. Paletn. It.* 1903, pp. 23-28 (plate), P. ONSI reports the result of excavations at Rivetazzo near Syracuse. The necropolis excavated there is the only one which represents all three phases of Sicel civilization.

TIVOLI.—**Inscribed Pedestals.**—At Tivoli, near the *mensae ponderariae* found in 1883, two pedestals of statues set up by the freedman M. Varenus Diphilus to his master M. Lartidius and his mistress Varena Maior, have been recently found. On one pedestal is a relief of Hercules, in a

trailing *tunica*, with sleeves, and a richly ornamented band under the arms. (R. LANCIANI, *Athen.* February 7, 1903.)

VAYES.—**A Neolithic Settlement.**—A neolithic settlement at Vayes in the Valle di Susa was excavated in November, 1900, and July, 1901. A partial report of the discoveries—chiefly stone implements—is given by A. TARAMELLI in *B. Paleon. It.* 1903, pp. 1-23 (pl. ; 3 figs.).

VERONA.—**Discovery of a Villa.**—At Verona remains of a suburban villa of the imperial period have been found. (C. CIPOLLA, *Not. Scavi*, 1902, pp. 435-436.)

VARIOUS MINOR DISCOVERIES.—In *B. Paleon. It.* 1902, pp. 247-256 (2 figs.), L. PIGORINI notes the following discoveries. In *Istria*, in the exploration of the ancient Nesazio, stones with Mycenaean decoration have been found, indicating an earlier civilization than that hitherto discovered. (See p. 389 *infra*.) Pre-Roman antiquities, chiefly of terra-cotta, have recently come to light in **Padua**. A vase of the Villanova type, formed of bronze plates, found at **Orvieto** and now in the Chigi Museum in Siena, has been recently published by Pellegrini, who believes it to be an Etruscan product of the eighth or seventh century B.C. Pigorini thinks it an importation from the East. *Id. Ibid.* pp. 38-39, reports the discovery of neolithic dwellings near **Faenza**, and, *Ibid.* pp. 42-43, the discovery of stone implements indicating a neolithic settlement near **Cagliari**.

SPAIN

SANTIPONCE.—**Statue of Diana.**—A statue of Diana, described as a good reproduction of a well-known Roman type, has been found at Santiponce, the ancient Italica, on the right bank of the Guadalquivir near Seville. Excavations at the site should prove profitable, as the place was important in ancient times. (DIEULAFOY, *C. R. Acad. Insc.* 1903, p. 38.)

VILLANEUVA Y GELTRU.—**Terra-cotta Figure of a Goddess.**—The collection of Victor Balaguer in the Museum of Villaneuva y Geltru contains the upper part of the terra-cotta figure of a goddess. She wears a stephané and above this a high polos upon which appear a sheaf of wheat and feathers. The color is well preserved, but the work is poor, as the coroplast has scarcely retouched the figure, though it has been made in a worn mould. The lower part of the figure was closely wrapped, and does not seem to have had much resemblance to the human form. It seems to represent Isis-Demeter and to be a product of Alexandrian syncretism, though no exactly similar figures are known. (P. PARIS, *Revue des Études Anciennes*, V, 1903, pp. 15-18; pl.)

FRANCE

COLLECTION OF BAS-RELIEFS OF ROMAN GAUL.—The Minister of Public Instruction and the Fine Arts has decided to publish a collection of the bas-reliefs of Roman Gaul. All the monuments are to be photographed, and a text is to be added giving the provenience, size, etc. The work is to be prepared by Captain Espérandieu, in connection with the Museum of Saint-Germain. (*R. Arch.* I, 1903, p. 286.)

ARLES.—**Discovery of Architectural Sculptures.**—At the pulling down of a block of old houses on the eastern side of the Roman Theatre at Arles, near the Roman city gates, numerous fragments of ancient architecture were discovered, which are supposed to have been built into the fortifi-

cations after the invasion of the Saracens in the eighth century. Some blocks of stone bore interesting chiselled decorations; one, almost complete and undamaged, is ornamented with a frieze of the heads of bulls and open jaws of lions in bas-relief, and must have formerly belonged to the outer wall of the theatre; another, which is adorned with a chariot, led by winged genii, is assumed to have belonged to the Roman circus. Portions of columns were also found, which are encircled with vines, from which small human figures and birds peep out. Fragments of the bas-reliefs of an Arch of Triumph of the third century have been found in such quantity that it is almost possible to reconstruct the arch with them. (*Athen.* March 16, 1903.) See also *R. Arch.* I, 1903, pp. 412-413, from *Chron. d. Arts.*

CHASSENARD. — A Roman Grave. — In Auvergne, near Clermont, at Chassenard (Allier) and Martres-de-Veyre, were found, many years ago, two Gallo-Roman graves of special value. In the latter were preserved all the garments and ornaments, as well as the pottery, buried with a young Arvernian woman. The former is described by J. DÉCHELETTE in *R. Arch.* I, 1903, pp. 235-258 (13 cuts). The ashes had been buried in a bronze vase inside a large *dolium* of gray clay. The vase contained also a mask of iron, remnants of a *lorica hamata*, *gladius*, *cingulum*, *torques*, and *corniculum*. The mask as a piece of armor is discussed, and other examples cited. The *corniculum* is identified with small ornaments, lyre-shaped, with two serpents for the arms. It has hitherto been known only through the literature. There were also found bronze vases and strigils, two silver coins of Caligula, and two iron dies and their counters for coining money. Both were blank. This leads to a publication and discussion of six matrices found at Paray-le-Monial in 1863, and belonging to types of Augustus, Tiberius, and Caligula. These are associated with the visit of Caligula to Gaul in 40 A.D., and to the same period the grave at Chassenard is assigned. A grave at Neuvy-Pailloux, in which two iron masks were found, is shown by the potters' stamps to belong between 25 A.D. and 70 A.D. Of six examples of these iron masks, the four which can be dated are earlier than 70 A.D.

FONT-DE-GAUME. — Palaeolithic Paintings. — In *C. R. Acad. Insc.* 1903, pp. 117-129 (5 cuts), Dr. CAPITAN and Abbé BREUIL describe a series of remarkable palaeolithic decorations in the cave of Font-de-Gaume, near Eyzies (Dordogne), discovered by them in 1901. They are partly carved and partly painted in red and black. In some cases, carvings have been later covered with paint. The animals represented include the aurochs, reindeer, antelope, mammoth, and others. They are drawn in the inmost recesses of the cave, and can only have been executed by artificial light. It is suggested that they were made in order to obtain some power over the animals, which are exclusively those useful to the primitive man. In *Ibid.* pp. 130-134, E. T. HAMY adds a brief discussion of this superstition, and notes that the paintings seem later than the carvings, and that in one case a good carving of reindeer has been colored in part by an artist who had never seen the animals.

MEAUX. — Relief of Venus and Adonis. — In *Revue des Études Anciennes*, V, 1903, pp. 79-80 (cut), G. GASSIES publishes a relief representing Venus and Adonis, found at Meaux in 1899. It seems to be earlier than the third century of our era, and, like most of the Gallo-Roman reliefs, is of moderate size. Both figures are nude, and Venus holds a mirror in her right hand.

Such groups are due to the influence of Syrian cults under the Empire, and are frequent on funeral monuments. This relief seems to have formed part of a monument similar to that at Igel.

PARIS. — A Gallo-Roman Necropolis. — There has been discovered, in the gravel pits on the Rue du Hameau in Paris, remains of a Gallo-Roman necropolis. Four trenches and two small pits were opened, between February 21 and March 27, 1903. All contained human bones, calcined and broken; fragments of pottery, including so-called Samian ware; and, especially, many fragments of the bones of animals, on which various devices were engraved, chiefly combinations of V, I, and X. In only one case were the bones and ashes in an urn, but in all cases the remains seem to have been covered by a slab of stone or tiles. (E. RIVIÈRE, *C. R. Acad. Insc.* 1903, pp. 142-151.)

SAGONNE. — Dedication to Soucona. — In December, 1899, there were discovered near Sagonne the lower part of a statue, two Gallic and some small Roman bronze coins. The inscription on the base shows that the statue was dedicated to the goddess *Soucona*, the nymph of the Sagonne. The name appears in the forms *Soucona*, *Saucona*, and *Sagona*. (S. R., *R. Arch.* I, 1903, p. 62.)

SAUJON. — Inscription in Unknown Alphabet. — In *Revue des Études Anciennes*, V, 1903, pp. 129-135 (pl.; 6 cuts), C. JULLIAN publishes an inscription found in the ruins of the Camp de Toulon, near Saujon. The six characters have some resemblance to the Celtiberian letters, and also to those of southern Gaul and northern Italy. It is possible that they are not ancient, but they are deeply cut, and do not resemble workmen's marks, of which a large collection is given.

VENTABREN. — Gallo-Ligurian Names in an Inscription. — Near Ventabren, between Marseilles and Aix, a tomb has been found containing a sandstone coffer with the ashes of the dead, and above, two slabs bearing inscriptions. One, in Greek characters, reads ΟΥΕΝΙΤΟΥΡΑ ΚΟΝΑΔΡΟΝΝΙΑ. — two Celtic names; the other, in Latin, is *Vectit(us) Biraci*. (H. DE GÉRIN-RICARD and Abbé A. DAGNEL, *C. R. Acad. Insc.* 1903, pp. 58-61.) According to ARBOIS DE JUBAINVILLE the name *Venitouta* is Gallic, the first element being the same as the Irish *fin*, the second the same as *tiath*. *Quadrantia*, however, is Ligurian, and equivalent to Oscan *Petrunia*, Latin *Petronia*. The first element is *quadru*, Oscan *petru*, Latin *quatuor*. This combination of names agrees with Strabo's statement that this region was inhabited by Κελαρολύγες, i.e. Gallo-Ligurians. (*C. R. Acad. Insc.* 1903, pp. 108-111.)

VILLELAURE. — A Mosaic. — At Villelaure (Vaucluse) a curious mosaic has been found. The border contains scenes of hunting, while the central picture represents the discovery by Artemis of Callisto's fault, and her punishment. Zeus and Callisto are represented on a silver vase found near Valentia in Spain. (HÉROX DE VILLEFOSSE, *C. R. Acad. Insc.* 1903, p. 168.)

VARIOUS MINOR DISCOVERIES. — At Apt (Apta Iulia) has been found a small bronze bust, representing a bearded Bacchus crowned with ivy, as well as bronzes of Vespasian, Domitian, and Trajan, one of which is a rare type. (*R. Arch.* I, 1903, pp. 282-283.) — The Roman monuments of Arlon (Orolanum), after a long sojourn in obscurity, have been arranged in accessible and well-lighted rooms. All have been photographed,

so that a complete catalogue can be easily made. (*R. Arch.* I, 1903, pp. 61-62.) — It is reported that the remains of a Gallo-Roman villa have been discovered near **La Borie** (Dordogne). Excavations were to be undertaken by the Société historique et archéologique du Périgord. (*R. Arch.* I, 1903, p. 75.) — *B. Arch. C. T.* December, 1902, pp. ix-xi, contains five Latin inscriptions recently found in **Lyons**. One is from the base of a statue of a priest at the altar of the Caesars at the temple of Rome and Augustus; two others are epitaphs. — The first Roman inscription from **Vitrolles**, near Rognac, is published by M. CLERC in *Revue des Études Anciennes*, V, 1903, p. 196. It reads, [I]ulian[us] m[at]ri? | [pi]etissima[e] | Servata | annorum XXV.

BELGIUM

BRUSSELS. — **Busts from Asia Minor.** — The Museum of the Decorative Arts in Brussels contains two busts from Smyrna, of the kind which were placed on tombs. One is a female head in marble, of no great artistic value; probably a work of the first century of our era. The other, also feminine, is of terra-cotta, and attracts attention by its evident portraiture. There is good reason to believe that it has been moulded from a death-mask, and retouched by the sculptor, who has opened the eyes and sought to give an appearance of life to the face. It thus differs from the bronze funeral masks or clay masks buried with the dead, and may be connected with the use of moulds in portraiture, ascribed by Pliny to Lysistratus, brother of Lysippus. The bust, which is of about the time of Augustus, is also interesting as an Asiatic example of the revived use of terra-cotta for statues, which is so marked in Italy about this time. (M. COLLIGNON, *R. Arch.* I, 1903, pp. 1-11; 2 pls.)

GERMANY

BERLIN. — **Acquisitions of Sculpture.** — The recent additions to the collection of antiquities at Berlin, exclusive of finds from Asia Minor, which go to the new Pergamene Museum, are published by C. WATZINGER in *Arch. Anz.* 1903, pp. 29-41 (13 cuts). Among the most interesting are an inscribed fluted column from Melos, lacking the capital and votive statue that it supported; a small head from Selinunto, somewhat earlier than the heads from the Heraeum there; a tufa head from Attica, resembling the stele of Aristion; a statue with Roman portrait head, which has suggested the proper restoration of the "Aspasia" head in Berlin; a head of Pericles from Lesbos, a faithful, but somewhat expressionless, copy of the head by Cresilas; an original Greek male head, of about 400 B.C., Argive school; a very beautiful bronze statuette of Hypnos, from Spain, the best one known. There are twelve grave-reliefs, chiefly Attic and Boeotian, a brightly painted early tufa sarcophagus from Italy, and a few other fragments of sculpture and inscription.

Reproductions from the Berlin Museums. — Reproductions can now be had of some of the most famous ancient bronzes and silver objects in the Berlin museums, — the Dodona warrior, the Argive youth, a silver bowl with maenad from Hermopolis, pieces of the Hildesheim silver treasure, and others. (*Arch. Anz.* 1902, p. 162.)

DIEDENHOFEN. — **Gallo-Roman Inscription.** — At Diedenhofen (Thionville) the removal of Vauban's fortifications has led to the discov-

ery of ancient remains, among them a Gallo-Roman inscription of the fourth century, referring to Coimagus and Dubna, daughter of Viredon, — all Celtic names. (*Wochenschrift für klass. Philologie*, 1903, col. 474.)

SAALBURG. — **Discovery of a Mithraeum.** — The *Kölnische Zeitung* reports the excavation of a Mithraeum near the entrance to the necropolis on the right of the Roman road to Hedderheim. Near the entrance was a votive column dedicated by Condollius. The sanctuary had the usual form, — a broad nave, and two side aisles. The entrance was at the south, and in the north wall was the place for the usual relief of Mithras killing the bull. The relief itself has not yet been found. (*Berl. Phil. W.* 1903, col. 861.)

AUSTRIA

CARNUNTUM. — **A Bronze Relief.** — Under the title 'Bronzereliefs vom Limes,' R. MÜNSTERBERG publishes in *Jh. Oesterr. Arch. I. VI*, 1903, pp. 69-78 (pl.; 4 cuts) a curious series of representations of Ganymede and the eagle, from Carnuntum and other posts on the Roman frontier. The head and shoulders of Ganymede rise from a sort of calyx of leaves, while above his head appears the eagle, whose claws are sometimes visible below the boy's arms. In the field, which is usually circular or oval, appear various attributes, such as the shepherd's pipe, dog, etc. The design evidently is derived from Hellenistic originals. In one case it has been modified to represent a bust of Athena with the aegis, and an eagle on her helmet. The exact use of these bronzes is not clear. They seem connected with military ornaments and may in some cases have adorned shields. The device of Ganymede and the eagle is frequent on funeral monuments, symbolizing the heroizing of the dead, but here it seems rather to symbolize the triumph of the Roman eagles.

NESIACTUM. — **Excavations in 1900 and 1901.** — The results of excavations at Nesiaetum, northeast of Pola, in 1900 and 1901, have been recently published by the director, Professor STICOTTI ('Relazione preliminare sugli Scavi di Nesazio,' in *Atti e Memorie della Società Istriana di Arch. e Storia*, and separately). Interesting private houses and public buildings have been found, with inscriptions, good architectural fragments, and many small objects. Near the city a pre-Roman necropolis containing various strata was excavated. Here were found fragments of *situlae* with decorations of the kind familiar in Venetia and the eastern Alps. More important is the discovery of stone slabs covered with Mycenaean, and "early Attic" patterns, such as spirals in various combinations and an interlaced meander. They show the persistence of this style in these regions, where they are found even in the stone age. (M. HOERNES, *Jh. Oesterr. Arch. I. VI*, 1903, *Beiblatt*, col. 67-72; 7 figs.)

GREAT BRITAIN

ROMAN BRITAIN IN 1902. — Excavations were continued at Silchester, Caerwent, and Hadrian's Wall; and the Scottish Antiquaries, having completed Inchtuthill, dug at Castlecary. At Silchester considerable ground was excavated, but few buildings were found. A fragment of an inscription has letters about five inches high. At Caerwent a small building, thought to be a shrine, was excavated, and among other objects a peculiarly ugly sandstone head was found. At Hadrian's Wall, excavations at Castlesteads

showed that the Vallum passed south of the fort, which thus stood between Vallum and Wall. At Castle Cary, on the Wall of Antoninus, a fort about 350 x 450 ft. was found, and its outline traced, in spite of its much damaged condition. The ramparts were in part of fine dressed stone. Remains of stone buildings were found, and a pit containing many old boots. There are no traces of rebuilding or different periods of occupation. Several "villas" have been discovered in various localities, but have yielded nothing noteworthy. (F. HAVERFIELD, *Athen.* April 18, 1903.)

A NEW FRAGMENT OF THE PARTHENON FRIEZE.—In the *Journal of the Royal Institute of British Architects*, X, 1902-1903, pp. 31-34 (4 cuts), A. S. MURRAY reports the recovery of a fragment of the frieze of the Parthenon. It was found in a rockery in Essex, at a place once the home of Thomas Astle, and seems to have been acquired by James Stuart in 1750. His collection was shipped to Smyrna, and there came into the possession of an English sea-captain, who brought it to London where it ultimately became the property of Thomas Astle. This fragment belongs to the left upper corner of a slab of the north frieze (XXXV Michaelis) and contains the heads of a youth and of a horse. It does not appear in the drawings of Faydherbe (Carrey), Stuart, or Pars. In the same place a little before was recovered the fragment of the inscription from the monument erected by the Athenians to the volunteers from Cleonae, who fought at Tanagra (457 B.C.). It was published in 1771, but had since disappeared. In *R. Arch.* I, 1903, pp. 274-277, S. REINACH reports an article by Michaelis in the *Allgemeine Zeitung (Beilage, No. 296)* of Munich, in which is given a history of this discovery and of others of a similar kind in previous years. The hope is expressed that the private collections in England may be thoroughly searched for fragments of the Parthenon and other works of art which have disappeared with the sale or removal of the buildings in which they were once kept.

LONDON.—Greek Art at the Burlington Fine Arts Club.—The important loan exhibition of works of Greek art, which was opened in June in the rooms of the Burlington Fine Arts Club is described in *Athen.* June 20, 1903, and by H. N. FOWLER in the *Nation*, July 30, 1903. The sculpture covers the period from the end of the sixth century to the Augustan age, and almost every object is a fine specimen of its kind. Conspicuous are the Petworth head of Aphrodite, ascribed to Praxiteles, the bronze head of Apollo from Chatsworth (Furtwängler, *Intermezzi*, pls. i-iv), and a female head of Parian marble from Chios now in the Warren collection. From the same collection comes a fine marble statuette of Heracles, of the type attributed by Furtwängler to Myron. The exhibition includes marbles, bronzes, terra-cottas, vases, gems, and coins.

A Marble Head from Arundel House.—S. R. publishes in *R. Arch.* I, 1903, pp. 427-428 (cut) a marble head in the possession of Judge Snagge of London. It was dug up in the garden of Arundel House, where it seems to have been left at the time when the Arundel marbles were transferred to Oxford. The head is probably that of an athlete in the style of the fourth century B.C., and is a good Greek work.

A Roman Wall.—While tearing down Newgate Prison, a part of the old Roman wall of London was discovered beneath the burial place of those who were executed in the prison. The wall was built in 305 A.D. by Con-

stantine and repaired in 370 A.D. by Theodosius. (*Wochenschrift für klass. Philologie*, 1903, col. 726-727, from *Vossische Zeitung*.)

CAERWENT. — Excavations in 1901. — *Archaeologia*, LVIII, 1902, pp. 119-152 (5 pls.; 8 cuts), contains the full report of the excavations on the site of the ancient Venta Silurum in 1901, by T. ASHBY, JR., A. E. HUBB, and A. T. MARTIN. See *Am. J. Arch.* VI, 1902, pp. 372-373.

SILCHESTER. — Excavations in 1901. — *Archaeologia*, LVIII, 1902, pp. 17-36 (3 pls.; 6 cuts), contains the full report by W. H. ST. JOHN HOPE of the excavations at Silchester in 1901, and an appendix on the 'Plant Remains of Roman Silchester' by CLEMENT REID. See *Am. J. Arch.* VI, 1902, p. 373.

STRANRAER. — A Prehistoric Settlement. — MR. MACLELLAN MANN of Glasgow has resumed his explorations of a prehistoric settlement near Stranraer. From these further researches he finds that no stone was employed in the building of the houses, and the dimensions of the huts were surprisingly small. The flooring had been supported on a massively constructed foundation of pointed wooden logs set close together and more or less perpendicularly. One of the houses had more than sixty such logs in its foundation. The wood used was birch and oak, and the sharpening of the points had been done with some blunt-edged tool. Over traces of the flooring were evidences of a hearth, and many implements and utensils of stone and pieces of pottery were found. The walling was of wattle-work. The pottery is coarse, dark, and hand-made, without ornamentation. (*Athen.* July 4, 1903.)

THE WALL OF ANTONINUS. — Progress is still being made in the excavations connected with the Roman wall of Antoninus. The Glasgow Archaeological Society has cut into a section of the wall at Hillfoot, Bearsden, Dumbartonshire, disclosing sixteen layers of turfing, with a stone base 15 feet wide. The Scottish Society of Antiquaries is at present making cuttings in and around the fort of Roughcastle, two miles west of Falkirk. Sir Alexander Muir Mackenzie of Delvine, Perthshire, proprietor of the most northern Roman station which has as yet been disclosed, — that of Inchtuthill, — has published a monograph on the subject. He expects to trace the Roman road from Grassy Walls to Coupar Angus this year. (*Athen.* May 23, 1903.)

AFRICA

RECENT DISCOVERIES IN NORTH AFRICA. — In *Arch. Anz.* 1903, pp. 13-20, E. PETERSEN reviews the archaeological discoveries of the French in North Africa, as seen in a recent tour. In the Bardo at Tunis, as in the other museums, the floor mosaics are the most striking feature. With Egyptian and Romano-African rather than Alexandrine taste, they depict the wild life of land and sea and country scenes in endless and most instructive variety, but mythological or urban scenes are rare. In sculpture, on the contrary, late Greek influence overshadows either Punic or Roman, though it is often only the form that is Greek. Statues of gods, especially Baal and Tanit, and of important men, predominate over less serious subjects. Native ideas are more evident in the grave reliefs. The effigies on some fine sarcophagi are curiously designed rather as standing than as recumbent figures. The whole history of Carthage can be traced in its series of terra-cotta lamps. The puzzling little hatchets which are so numerous

may perhaps be razors. Their engraving is often Greek. No example is found here of the silver bowls of Caere and Praeneste for which a Carthaginian origin has been suggested. Picture vases are not common, though imported vases are found from many lands. The earliest resemble early Sicilian and Italian wares. At **Timgad**, the completeness of the recovery of the ancient city, forum, theatre, temples, porticos, streets, and houses is very striking, but compared with Pompeii there is a lack of decorative feeling and of historical perspective. Two stages of building can, it is true, be traced,—an earlier of sandstone and a later of limestone. There is much of a kind of *opus incertum*, walls of a pillar-and-lintel construction with spaces filled by smaller material bound with mortar. In the sanctuary of Aesculapius at **Lambaesis**, the rows of chapels lining the main avenue are curiously like the treasuries at Olympia. The monument at **Medracen**, with its fine Doric columns, belongs perhaps to some fifth-century prince.

ALGIERS.—**Discoveries in 1902.**—*B. Arch. C. T.* March, 1903, pp. xi-xxiv, contains a summary by BALLU of the work of the Service des Monuments historiques in Algiers during 1902. At **Cherchel** inscriptions, mosaics, remains of private buildings and of a road have been discovered. A large building, probably a temple, was found at the end of the year, but is not yet fully excavated. At **Tigzirt** the excavations have yielded little of value, but seem to promise good results. At **Tebessa Khâlia** baths decorated with mosaics have been found, and some fragments of sculpture. At **Guelma** (Calama) the excavation of the theatre has continued, and some sculpture and inscriptions have been found. At **Khamissa** (Thubursicum Numidarum) the excavations have been continued at the arcades discovered in 1901, and also at a Nymphaeum and a triumphal arch, while trenches have been dug at various points in order to obtain a plan of the city. At **Lambaesis** work has been continued behind the *praetorium* and *scholae*, where a sidewalk and unpaved street have been found, as well as a series of large rooms, which, however, have no connection with the street. Farther on the road was bordered by an Ionic portico. The baths have also been completely cleared, and a local museum established. **Timgad** has been the scene of a series of important works, which are described under sixteen heads. These include the discovery of eight streets, two large baths, making six public establishments in this city, a baptistery, a private house, the western portion of the *decumanus maximus*, a late and rude fortification belonging to a time when the city had become too weak to defend the more extensive walls, a series of large halls near the theatre, a public fountain, many inscriptions, and mosaics, including a fine one representing Neptune in a chariot drawn by four hippocamps and accompanied by dolphins. *Ibid.* January, 1903, pp. xiii-xxvii, contains a summary of the archaeological observations made by the officers of the topographical service in Algiers and Tunis. These are systematically arranged by departments and villages. They are very brief and chiefly concerned with the course of the roads, the identification of ancient sites, and the existence of ruins or other traces of ancient occupation.

CARTHAGE.—**Marble Sarcophagi.**—*C. R. Acad. Insc.* 1903, pp. 6-33 (5 cuts), contains two letters by Father DELATTRE and one by GAUCKLER on the discoveries of the former at Carthage during November, 1902. The excavations were in the necropolis near St. Monica, which seems to have

been the place of burial for the *rabs*, priests and priestesses of ancient Carthage. Father Delattre in his first letter describes the discovery of a fine anthropoidal marble sarcophagus, having on the cover the full-length figure of a priest, and another plain marble sarcophagus. All the objects found in the chambers and in the sarcophagi are carefully listed. Among the objects were two slabs bearing the funerary Punic inscriptions of two priestesses, both of whom were married. More important is the discovery announced in the second letter of a tomb containing two more marble sarcophagi, one bearing the figure of a priest, and the other that of a priestess. Color and gilding were employed on all, and on the latter are very well preserved. They are all of the fourth century B.C., and the sarcophagus of the priestess is described as a work of extraordinary beauty and great importance for the history of art. Gauckler's letter describes two statuettes which wear a cape with three stripes similar to that worn by the priestess. It seems a part of the sacred costume. The two Punic inscriptions are the subject of a note by P. BERGER in *C. R. Acad. Insc.* 1902, pp. 672-673.

A Punic Inscription.—In *C. R. Acad. Insc.* 1903, pp. 94-97 (cut), P. BERGER publishes a Punic inscription recently found by Father Delattre at Carthage. He translates it "Tomb of Sibboleth, merchant (fem.) of the city." The last word is, however, uncertain. Another Carthaginian inscription, which perhaps contains the name of Acre (Akko), is also discussed.

A Latin Inscription.—Father Delattre reports that the enclosing wall of the amphitheatre at Carthage has been cleared. The arena was almost exactly the size of the Colosseum. A number of interesting monuments have been discovered, among them the inscription *Cn. Lurinus | Abascanti' annus uoto | posuit libes | uenator | Taclegenio | RVM |*. HÉRON DE VILLEFOSSE connects with this a vase from Thapsus, with four reliefs of a *venator* in strife with animals, and the inscription *Telegenii nika*. The Telegenii seem to be an association, whose *venatores* performed in the arena at Carthage. (*C. R. Acad. Insc.* 1903, pp. 106-107.)

HENCHIR-DOUÉMIS.—**Dedication of Capitol.**—In July, 1902, Lacroix discovered at Henchir-Douémis in Tunis several Latin inscriptions, including one in honor of Septimius Severus, erected under Caracalla in 213 A.D. by the *Saienses Maiores*. Further excavations at this site have resulted in the discovery of a paved court, and near by a part of the dedication of the Capitol of *Saia Maior*, erected at the expense of an unknown magistrate, and dated exactly in 196 A.D. (GAUCKLER, *C. R. Acad. Insc.* 1902, pp. 562-564: facsimile.)

SOUK-EL-ARBA.—**Various Minor Discoveries.**—In *B. Arch. C. T.* November, 1902, pp. xiii-xix, GAUCKLER reports minor discoveries near Souk-el-Arba (Bulla Regia), including a large funeral stele with relief and inscription containing the first occurrence in Africa of the gentile name *Mutius*. Another inscription in honor of Severus, Caracalla, and Geta had been mutilated. In a well was found a colossal head of Vespasian, which had probably belonged to a statue near a public fountain. Among recent accessions to the Bardo Museum are two sculptured architectural fragments, one of which had been used in later times to mark the grave of the abbot, Iader.

SOUSSE.—**Terra-cottas.**—*B. Arch. C. T.* December, 1902, pp. xiv-xx, contains a description by GAUCKLER of terra-cottas from Sousse

(Hadrumentum), including statuettes, lamps, and vases. One of the statuettes is unique, representing a young woman carrying a child on her hip, much as the Bedouin women now carry their babies.

THUGGA.—**Excavations in 1902.**—In *B. Arch. C. T.* December, 1902, pp. xx-xxvi, is a report by GAUCKLER on the excavations at Dougga (Thugga) in 1902. From April to June work was continued to the south of the Capitol, bringing to light a series of private houses, much damaged during the Byzantine period. The course of the Byzantine wall of the sixth century has been traced in this region. The forum cannot be far from the point now reached, for fragments and inscriptions have been found from the *macellum* and temples of *Liber Pater*, *Concordia Augusta*, *Mercurius*, and *Aquilas Augusta*, all of which must have been on or near the forum. In October and November work was resumed on the right of the Capitol, where an open, paved square was found, on one side of which were the foundations of a large building, which has not yet been cleared. At the south the main gate of the ancient city, a triumphal arch, has been cleared, and near this a very handsome house discovered, containing, among other decorations, a large mosaic representing Vulcan and the Cyclopes forging the armor of Aeneas. The excavations have also yielded many inscriptions.

TIMGAD.—**A Mosaic.**—In one of the private houses excavated in May, 1902, at Tingad, was found a mosaic whose central scene represented Diana at the bath surprised by Actaeon. It is of remarkably fine execution and perfect, except in the upper left-hand corner. (*B. Arch. C. T.* July, 1903, pp. v-vi.)

TUNIS.—**Recent Discoveries.**—In *B. Arch. C. T.* June, 1902, pp. vi-xiv, GAUCKLER reports recent discoveries in Tunis. The building of the new naval arsenal at **Sidi-Abdallah** has led to the discovery of Roman remains, generally of small interest, but including some rooms which seem to have belonged to a bath. One was paved with mosaics, including a device of two horses pawing the ground on either side of a column. At **Chebba**, Novak and Épinat have excavated a Roman villa with twelve rooms, most of which were paved with mosaics of good style. The principal room contained a mosaic, showing in the centre Neptune riding over the waves attended by Tritons and Nereids. The four corners were occupied by figures representing the four seasons. Another villa in the same region yielded similar mosaics, one of which represented a fishing boat and fishermen, in a style common on African mosaics. *Ibid.* July, 1902, pp. xiv-xxi contains a report by GAUCKLER of discoveries in Tunis during the previous year. The trench through the Punic necropolis of **Dermech** showed near the surface many remains of private houses, evidently of considerable importance, below which were Carthaginian graves apparently of the sixth century B.C. All were simple in structure, but contained often objects of much value, jewelry of gold, silver, agate, and glass, seals with Egyptian deities, a cup of rock crystal, and many figurines. Another excavation near the road to **Sidi Bou Saïd** led to the discovery of a Roman necropolis of the first century. At **Dougga** (Thugga) the excavations were in the region between the Capitol and the Dar-el-Achab. Many fragments of sculpture and architecture and over one hundred inscriptions were found. Among the latter three were Punic and one Libyan. At **El-Djem** (Thysdrus) a

Roman bath has been excavated, decorated with geometric mosaics, and containing a number of pieces of sculpture of the period of the Antonines and many inscriptions. The chief effort has been expended at **Bou-Ghara** (Gigthi), where the excavation of the forum has been completed by uncovering the curia and basilica. Both had been much altered in later times, and in the demolition of late walls many pieces of sculpture and architecture were found, and numerous inscriptions, including a long series relating to the rich family of the Servaei. Other excavations have brought to light some of the ancient streets and a large building, possibly a market. Other ruins have been found along the shore, while the line of the main street and the ancient sewer beneath is now marked by the bed of a little stream. It led from the port to the *macellum*, which closely resembled that at Tingad. Not far from this point has been found a temple of Mercury, noteworthy for its careful and original architectural decorations. The same delicacy in the use of color is noteworthy in a large villa whose excavation has only begun.

Ibid. July, 1902, pp. vii-xv, GAUCKLER publishes fifteen Latin inscriptions from Tunis. One is a milestone of 123 A.D. from the road between Carthage and Thevestis, the others are dedications or epitaphs. *Ibid.* January, 1903, pp. iv-ix, contains fourteen Latin inscriptions from various parts of Tunis communicated by Father DELATTRE, and an account of a mosaic with a Greek inscription (*θεοδούλου*) found at Sousse. *Ibid.* February, 1903, pp. vii-viii, GSELL describes a hoard of silver coins of Juba II, recently found at Cape Djinet. *Ibid.* March, 1903, pp. xxiv-xxxi, GAUCKLER publishes a description of ninety-seven Roman lamps found near El-Djem and now in the Bardo Museum.

BYZANTINE, MEDIAEVAL, AND RENAISSANCE ART GENERAL AND MISCELLANEOUS

ACRE.—**A Latin Inscription.**—In *C. R. Acad. Insc.* 1903, pp. 72-73 (cut), CLERMONT-GANNEAU publishes a Latin inscription of the thirteenth century from Acre, containing the epitaph of Brisa, wife of G. Petrus de Saone (?) and daughter of Johannes Medicus.

CARTHAGE.—**Christian Inscriptions.**—Christian inscriptions from Carthage—thanks to the explorations of Father Delattre—have been secured by the thousand. Thus far these inscriptions have not been thoroughly classified. They are, however, being studied by P. Monceaux, who, by the aid of dated inscriptions from Africa, has ascertained that for the most part they belong to the fourth and fifth centuries. (*B. Soc. Ant. Fr.* 1902, p. 353.)

EGYPT.—**An Arab Tomb at Assuan.**—In the *Proceedings* of the *Soc. Ant.* XIX, No. 1, pp. 121-123 (pl.; cut), SOMERS CLARKE reports the destruction of an interesting monument of Arab architecture, the tomb called Saba wa Sabeen Wali at Assuan, which has been removed to make room for a reservoir connected with a new system of water works.

MEDIAEVAL ICONOGRAPHY.—**Portraits from Manuscripts.**—In *M. Soc. Ant. Fr.* LXI, pp. 23-51, H. MARTIN publishes some notes for a "Corpus Iconum" of the Middle Ages. After speaking of the interest and difficulties of gathering from manuscripts a series of portraits, he publishes

a miniature of Petrarch, which he considers of no value as a portrait, and three miniatures of iconographic interest. One of these in a manuscript dated 1311, and now in the Library of the Arsenal (No. 6329, fol. 1 v°.), represents Jeanne, Comtesse d'Eu et de Guines; the second, from a Book of Hours, also in the Library of the Arsenal (No. 644, fol. 26 v°.), represents Jeanne de France, first wife of Louis XII, and is dated about 1500; the third, also in the Library of the Arsenal (No. 4009, fol. 1 v°.), contains portraits of Louise de Savoie, of Rochefort, and of Pierre Fabri, and is dated 1518.

ARCHITECTURAL DETAILS AND TELEPHOTOGRAPHY.—In the *American Architect*, LXXX, 1903, pp. 45-47, E. MARRIAGE writes concerning telephotography as a means of securing photographs of architectural details. The article contains a number of useful and practical suggestions.

A NEW ART JOURNAL.—A new art periodical, known as *The Burlington Magazine*, made its appearance in March, 1903. It is published in London, appearing at the beginning of every month, and is accompanied by a supplement known as *The Burlington Gazette*. The magazine is specially intended to meet the wants of connoisseurs, and will occupy itself largely with the art of the past. The names of many well-known writers are found on the consultative committee. The gazette will contain accounts of art and book sales, general art news and notes. The annual subscription for the magazine in the United States is \$10.80, or including *The Burlington Gazette*, \$12.00. The American agents are Samuel Buckley & Co., 100, William Street, New York.

GREECE AND MACEDONIA

GREECE.—*Protection of Frankish Monuments.*—The Greek government has placed among the national monuments two important works of the Frankish period in the Morea. One is the fortress of Chlemoutzi (Clermont), at the south of Cyllene, and the other is the church of St. Sophia, at Andravida, the capital of Villehardouin. These are the first monuments of this period to receive official protection. (*C. R. Acad. Insc.* 1903, pp. 56-57.)

Inscriptions from Zacynthus.—DANIEL QUINN has published in *Appo-ris*, 1902, pp. 553-600, a collection of 162 recent inscriptions from Zacynthus. The dates range from the early sixteenth to the end of the nineteenth century. About twenty-one are wholly or in part in Latin, and two are in Italian; the rest are in Greek, and not without interest for the history of the language.

MACEDONIA.—*Byzantine Inscriptions.*—In *Athen. Mith.* XXVII, 1902, pp. 431-444, H. GELZER publishes 'Byzantine Inscriptions from West Macedonia,' collected during a visit to Achrida (Ochrid), Korytza (Gorča), and Kastoria (Kesrie). Nine are published, of which one is in church Slavic, and one in a Greek cipher still understood by the monks of Athos. Four of these have been published previously, but with errors. The earliest with a date is of 1316 A.D.

ITALY

A BIBLIOGRAPHY OF ITALIAN ART.—At the International Congress, held in Rome, April, 1903, Dr. Alfredo Romualdi presented a programme for a bibliography of Italian art. He proposed the establish-

ment of local commissions and a central commission to gather, as far as possible, all publications relating to Italian art. A committee, consisting of A. Venturi, Professor N. Campanini, and Dr. Romualdi, was appointed, to whom this matter was referred. The hope is expressed that next year an *Annuario bibliografico dell' arte italiana* will be established. (*L' Arte*, 1903, pp. 60-66.)

BERGAMO. — 'The Resurrection of Christ,' by Basaiti. — In the collection of Conte Roncalli at Bergamo there existed a painting representing the Resurrection of Christ, which Morelli attributed to Basaiti. This painting shows strongly the influence of the Paduan and Early Venetian School. It has recently been sold, and is to leave Italy. It is published in *Rassegna d' Arte*, 1902, pp. 182-183.

FLORENCE. — Frescoes by Baldovinetti and Castagno. — In the *Rep. f. K.* 1902, pp. 392-393, C. v. F. publishes six documents which refer to frescoes by Baldovinetti and Castagno in the Annunziata at Florence.

IESI. — Paintings by Lorenzo Lotto. — In *Rassegna Bibliografica dell' Arte Italiana*, 1902, pp. 62-71, 134-138, G. ABBRUZZETTI describes several paintings by Lorenzo Lotto at Iesi. These are: 'The Entombment,' signed, and dated 1512; 'The Annunciation,' without signature or date, but probably executed between 1512 and 1515; a portrait of himself (?), signed, and dated 1515; a 'Madonna enthroned with Sts. Jerome and Joseph,' signed, and dated 1526; 'Santa Lucia,' without signature or date, but ordered of Lotto in 1523, and probably painted in 1532; 'The Visitation,' signed, and dated 1530; and a 'S. Biagio,' known only from documentary evidence to have been painted between 1533-54.

MILAN. — The Sforza Portraits by Luini. — The fourteen lunettes in fresco by Bernardino Luini, representing different members of the Sforza family, are published by LUCA BELTRAMI in *Rassegna d' Arte*, 1903, pp. 1-5, 32-36. See *Am. J. Arch.* VII, 1903, p. 140.

The Church of San Raffaele. — Some sketches for the façade of San Raffaele, made by Pellegrino di Tibaldo Pellegrini, are published by F. M. VALERI in *Rassegna d' Arte*, 1903, pp. 57-59.

Numismatic Society. — The Numismatic Society of Milan, established November 1, 1902, has begun the publication of a *Bollettino di numismatica e di arte della medaglia*, and is about to establish a numismatic library for its members. (*Arch. Stor. Lomb.* 1903, p. 203.)

Two Unknown Painters of the Thirteenth and Fourteenth Centuries. — In a deed bearing the date October 26, 1263, one of the witnesses named is *Girardus filius quondam ser Guillelmi Pictoris*. In another Milanese deed, dated September 10, 1336, one of the witnesses was *Galraueus pinctor filius quondam domini Arderici*. These painters seem to be unknown. (*Arch. Stor. Lomb.* 1903, p. 201.)

Textile Industries. — In the *Arch. Stor. Lomb.* 1903, pp. 34-63, F. MALAGUZZI VALERI writes concerning the makers of embroidery and tapestry in Milan during the fifteenth century. A number of contemporary documents are here published. *Ibid.* 1903, pp. 64-125, E. VERGA writes concerning the corporations engaged in the textile industries at Milan, their relations, and conflicts during the sixteenth, seventeenth, and eighteenth centuries.

NAPLES. — A Portrait of Luca Pacioli. — The Museum at Naples has recently acquired an important portrait which appears to be that of Luca

Pacioli, by Iacobo de' Barbari. From the various symbols which appear in the painting, it is evident that the painting represents a monk who was an architect. Who the architect was, appears to be indicated by the following inscription on a book, *LI. R. LVC. BVR.*, which is interpreted to mean, *Libri Recerendi LVCae BVRgensis*. It seems, therefore, that the figure represents Fra Luca Paciolo di Borgo San Sepolero. The signature of the artist is given in the inscription, *IACO. BAR. VIGENNIS 1495*. Although there is some uncertainty as to the signification of the word *Vigennis*, the artist's signature appears to be that of Iacobo de' Barbari. If the word *Vigennis* here indicates that the painting was made in the twentieth year of his age, his birth would have occurred in 1475, some twenty-five years later than the date assigned by Morelli, Bode, and others.

ORVIETO.—**Frescoes in San Giovenale.**—In the abandoned basilica of San Giovenale at Orvieto are found some frescoes in poor condition of preservation. The frescoes relate to the life of the Virgin. Two of them, an 'Annunciation' and 'Holy Family,' are published by GUIDO GAGNOLA in *Rassegna d'Arte*, 1903, pp. 22-23. He assigns the frescoes to Bartolo di Maestro Fredi, a Sienese painter of the fourteenth century.

PARMA.—**Reliefs by G. A. Omodeo.**—In the Museum at Parma there are two marble reliefs, which seem to have escaped the attention of historians of sculpture. Both of them contain subjects from the Old Testament, and corresponding subjects from the New Testament,—a mode of representation rarely found in the Renaissance period. The style of these sculptures enables C. VON FABRICSY to assign them to Omodeo. (*Rep. f. K.* 1902, pp. 395-397.)

RIETI.—**Lombard Architects in the Fifteenth Century.**—In *Rassegna d'Arte*, 1903, pp. 66-68, A. BELLUCCI recovers from the archives of Rieti the names of a number of Lombard architects who were occupied in that town between the years 1439 and 1458.

SANT' ARCANGELO DI ROMAGNA.—**Altarpiece by Iacobello Bonomo.**—In the Municipio of S. Arcangelo di Romagna there is a Gothic altarpiece representing the Madonna and various saints. It has the following signature: *MCCCLXXXV Iacobelus de Bonomo venetus pinxit hoc opus*. The altarpiece is described by PIETRO PAOLETTI in *Rassegna d'Arte*, 1903, pp. 65-66. As this is the only signed painting by this artist, it may lead to the discovery of the authorship of other early Venetian paintings. Paoletti assigns to Iacobello a position, in the history of early Venetian painting, somewhat higher than that of Lorenzo Veneziano, and a little inferior to that of Niccolo di Piero.

ROME.—**The Crypt of St. Damasus.**—Wilpert has discovered at Rome, between the Via Ardeatina and the Via Appia, near the catacomb of St. Calixtus, the crypt of the Pope Damasus (366-381). The crypt is large, ornamented with frescoes, and has furnished an inscription which reads, *Hic Damasi Mater Posuit Lauren[tia Membra]*. The epitaph indicates also that Laurentia died at eighty-nine years of age, had four children, and was a widow for sixty years. It is known that S. Damasus was entombed in the same crypt with his mother, and that his tomb was near that of the martyrs Marcus and Marcellinus. Excavations are being continued in this region, with hopes of important results. (*Chron. d. Arts*, 1903, p. 102.)

The Villa Madama.—The unfinished Villa Madama, designed by Raphael and executed by his pupils, was the subject of a publication, in 1901, by Hofmann, entitled, *Raffaël in seiner Bedeutung als Architekt: I. Villa Madama zu Rom*. But as this volume is not likely to reach a very wide audience, P. GUSMAN publishes, in the *Gaz. B.-A.* XXX, 1903, pp. 314–324, a series of illustrations of this elaborately decorated villa.

FRANCE

FURNITURE OF THE SEVENTEENTH AND EIGHTEENTH CENTURIES.—In the *Burlington Magazine*, March, 1903, pp. 25–32, ÉMILE MOLINIER begins a series of articles on French furniture of the seventeenth and eighteenth centuries. The first article concerns the furniture in Louis XIV style, and is illustrated chiefly from specimens now in the Louvre.

ANGERS.—**Excavations in the Cathedral.**—The excavations in the cathedral at Angers are described by L. DE FARCY in *R. Art Chrét.* 1903, pp. 1–18. Besides the discovery of foundations, which aid in reconstructing the plan of the cathedral at various periods, the excavations brought to light remains of ancient pavements, enamel bricks, fragments of ecclesiastical vestments, and a curious sarcophagus of lead.

AVIGNON.—**Paintings of the Fourteenth Century.**—Amongst the last subjects studied by the late E. Müntz were the frescoes at Avignon. Here the 'Virgin' and 'Christ,' above the door of Notre-Dame-des-Doms, were painted by Simone Memmi. During the time when he was at Avignon, he painted a series of small paintings of the 'Passion,' which are now to be found in the museums of Liverpool, Antwerp, Berlin, and the Louvre. The painting at Liverpool is signed, *Simon de Senis me fecit*, with the date 1342. (*C. R. Acad. Insc.* 1902, pp. 237–238.)

BAYONNE.—**The Bonnat Collection.**—The well-known M. Bonnat has presented to his native town his valuable collection of works of art. Amongst other objects, it contains an interesting portrait by Rembrandt; a painting of 'Christ Blessing,' attributed to Piero della Francesca; a number of drawings by old masters; and some characteristic Italian and French works of sculpture. The collection is described by G. GRUYER in *Gaz. B.-A.* XXX, 1903, pp. 193–212.

CHARTRES.—**The Condition of the Cathedral.**—Some alarm is being felt because of the crack which has appeared in the tympanum of the principal entrance of the western façade of the cathedral at Chartres. In *R. Art Chrét.* 1902, pp. 486–487, H. CHABEUF expresses the desire that the strengthening of this portal may be secured without injury to its sculptural decoration.

CHÂTEAU DE BOUTHÉON.—**Fifteenth-century Fireplaces.**—Two very interesting fireplaces in the Château de Bouthéon (Loire), which were photographed by the late Léon Palustre, are now published by X. BARBIER DE MONTAULT in *R. Art Chrét.* 1903, pp. 53–56.

CHÂTEAU D'EU.—**Loss of Works of Art.**—The Château d'Eu, the seat of the Duke of Orleans, near Rouen, was virtually destroyed by fire, November 11. The efforts to save the art treasures were not entirely successful. Many objects of great value were destroyed, including two-thirds of the library of thirty thousand volumes. Among the art works rescued

was a statue of Psyche and a large bronze statue by Princess Marie of Orleans. (*The American Architect*, No. 1404, p. 64.)

CLAIRVAUX.—*The Treasures of the Abbey.*—Inventories of the treasures of Clairvaux were made in 1405–10, 1504, 1640, 1719, and 1741–42. The inventory of 1640 has been utilized by various writers, but is for the first time published in full by J. J. VERNIER in *Bibl. Éc. Chartres*, 1902, pp. 599–677. These treasures included numerous objects of French and Byzantine goldsmiths' work, dating from the twelfth and thirteenth centuries. The inventory of 1640 comprises 1049 numbers, and is valuable for the preservation of the nomenclature of ecclesiastical objects.

PARIS.—*The Dutuit Legacy.*—The splendid legacy left by M. Dutuit to the city of Paris is the subject of an article by G. CAIX in the *Gaz. B.-A.* XXVIII, 1902, pp. 441–448. Illustrations are given of a painting by Janssens and one by Terborch, of a Gubbio plaque, a bronze statuette, and a fine candlestick of the faience of St. Porchaire. The paintings of this collection are also studied by ÉMILE MICHEL in *Gaz. B.-A.* XXIX, 1903, pp. 19–36, 228–244. In the first of these notices he treats of the paintings of the Dutch school. Besides the two paintings already mentioned, the collection contains an interesting painting by Metsu, a very characteristic painting by Jan Steen and one by Adrien Van Ostade, a portrait of Rembrandt by himself, and other paintings by Maes, De Keyser, Weenix, Ruisslael, Van de Velde, Cuyt, Hobbema, and others. The second article considers the paintings of the Flemish and French schools and a collection of drawings.

A third article is from the pen of P. FRANTZ MARCOU in the *Gaz. B.-A.* XXIX, 1903, pp. 135–148. M. Marcou notices the ivories, the Mediaeval and Renaissance sculptures, enamels, pottery, and glass. The collection contains a number of examples of enamel work from the twelfth to the seventeenth century.

On December 11, 1902, the Musée Dutuit was opened by President Loubet. Of the ancient monuments the most notable is the very fine Hermes from Fins d'Annecy. A large figurine, which is given a prominent place, is a forgery. (S. R. in *R. Arch.* I, 1903, p. 284.)

Manuscripts of Eugène Müntz.—The manuscript notes of the late Eugène Müntz have been left to the Bibliothèque Nationale. These refer not merely to subjects upon which M. Müntz had published important volumes, but also contain material for a corpus of mosaics, in which work he was to have been assisted by various European scholars. (*Chron. d. Arts*, 1902, p. 317.)

In *Gaz. B.-A.* XXX, 1903, pp. 42–46, is an article by L. DUMIER on the late Eugène Müntz. It includes a list of his contributions to the *Gazette*, as well as of his published works.

The Museum of the Louvre.—In the *Gaz. B.-A.* XXIX, 1903, pp. 299–311, 369–390, A. MICHEL describes the acquisitions of recent years in the department of sculptures of the Middle Ages, Renaissance, and modern times in the Museum of the Louvre. The first article publishes a twelfth-century head of Christ, an interesting wooden statue of the end of the twelfth century, a thirteenth-century statue of S. Geneviève, a striking head of Christ crowned with thorns of the sixteenth century, also a S. Anne, S. Peter, and S. Suzanne of the sixteenth century. The second article pub-

lishes some interesting sculptures in wood and terra-cotta of the sixteenth century, a most representative marble relief by Agostino di Duccio, and a relief of Scipio which has been attributed to Verocchio and to Leonardo da Vinci. The French school of the sixteenth century is represented by a statue of Jeanne de Bourbon, and the later periods by a terra-cotta mask by Falconet, two very charming busts by Houdon, and other sculptures.

M. Lucien Claude Lafontaine has presented to the Louvre the right wing of the triptych representing the Three Holy Women, forming part of a 'Pietà,' of which the central panel had already been presented to the Louvre by the same gentleman. These paintings are by Colin de Coter, one of the rare Flemish masters of the fifteenth century who signed his paintings. The Louvre has also acquired a 'Holy Family,' by Bernard Van Orley, signed and dated 1521. (*Chron. d. Arts*, 1903, pp. 2-3.)

The twelve miniatures by François Dumont, presented to the Museum of the Louvre, form the subject of an article by H. DE CHENNEVIÈRES in *Gaz. B.-A.* 1903, pp. 177-192. François Dumont was born at Lunéville in 1751, learned the art of painting from Jean Girardet, and became miniature painter to Queen Marie Antoinette.

The Architect of Saint Denis.—Important light has been recently thrown upon the history of the abbey church of Saint Denis, through the discovery of a document published by H. STEIN in *M. Soc. Ant. Fr.* LXI, pp. 79-104. The document is found in the *cartulaires de l'abbaye de Saint Denis*, is dated 1247, and speaks of Petro de Mosterolio, *cementario de Sancto Dyonisio*. This designation indicates that he was at that time the master workman or architect of Saint Denis. Hitherto he has been known as Pierre de Montreuil, and has the credit of having been the architect of Sainte Chapelle, of the refectory and chapel of the Virgin at Saint-Germain-des-Prés, and probably of the refectory of Saint-Martin-des-Champs. He died in Paris, March 17, 1267. Topographical, historical, and archaeological reasons are assigned by H. Stein to show that he came, not from Montreuil, but from Montereau in the diocese of Sens. Several churches in this diocese show peculiar affinities of style with the portions of Saint Denis which were reconstructed in the thirteenth century. To him, therefore, belongs the credit of enlarging the nave and side aisles, of remaking the vaults of both nave and choir, the transepts with their portals, the triforium galleries, and the splendid rose windows. Stein is also of the opinion that he directed the execution of the tombs of Clovis II, Charles Martel, Pepin le Bref, Carloman, Hugues Capet, Robert, and Louis VI, which were constructed at this time.

Exhibition of Mohammedan Art.—The Union Centrale des Arts Decoratifs opened in the spring of 1903 a special exhibition of Mohammedan art. Here were gathered objects of metal, pottery, rugs, paintings, and other objects which are described by GASTON MIGEON, in *Gaz. B.-A.*, XXIX, 1903, pp. 353-368.

VERREY-SOUS-DRÉE.—**Discovery of a Burgundian Statue.**—H. Chabeuf has discovered, in the church at Verrey-sous-Drée, a remarkable statue of the sixteenth century. It represents Antoinette de Fontette, who, in 1547, founded the chapel of the castle at Verrey-sous-Drée. She is represented as kneeling with hands clasped in the usual attitude of a donor. This statue has been placed in the Museum at Dijon. (*R. Art Chré.* 1902, pp. 438-439.)

BELGIUM AND HOLLAND

BRUGES.—**Exhibition of Early Flemish Paintings.**—This Exposition has been made the subject of a careful study by M. J. FRIEDLÄNDER in *Rep. f. K.* 1903, pp. 66-91. See *Am. J. Arch.* VII, 1903, pp. 192-193.

The Façades.—A. Duclos published at Bruges, 1902, a quarto volume on the façades of Bruges. Eight of these are republished by L. CLOQUET in *R. Art Chré.* 1902, pp. 487-492.

THE HAGUE.—**A Miniature by Holbein.**—A very charming unidentified portrait by Hans Holbein is published by R. HOLMES in the *Burlington Magazine*, 1903, pp. 218-219. It is a miniature in the collection belonging to the Queen of Holland and preserved in her private library in the Royal Palace at The Hague.

GERMANY

BERLIN.—**Italian Drawings in the Museum.**—The drawings of the early Italian masters are now the subject of much critical study. The early possessions of the Berlin Museum have been carefully studied by CHARLES LOESER, whose attributions do not always correspond with those of the museum authorities. In the *Rep. f. K.* 1902, pp. 348-359, he describes a number of these drawings, to many of which he gives new attributions. The most striking instance is a drawing (Vol. XIII, No. 494, of the collection) assigned indefinitely to the Italian School, but which Loeser believes to be by Raphael's own hand. It represents half-figures of the Virgin and of St. Peter and is assigned by him to the year 1504.

The collection of drawings presented by von Beckerath to the Berlin Museum covers the history of Flemish, German, Italian, and Spanish art up to the eighteenth century. The Italian drawings form the subject of two articles in the *Gaz. B.-A.* XXVIII, 1902, pp. 471-482, and XXIX, 1903, pp. 47-58, by CHARLES LOESER. Many of the drawings were sketches for paintings which still exist. Many of the best-known artists of the Florentine, Umbrian, Venetian, Milanese, and other schools are represented. The articles are well illustrated by a number of the most noteworthy drawings.

MUNICH.—**The Baumgartner Altarpiece.**—Dürer's celebrated triptych, known as the Baumgartner altarpiece, in the Alte Pinakothek at Munich, has recently undergone a restoration which has attracted considerable discussion. It has long been known that the wings of this triptych were restored by the court painter, J. G. Fischer, shortly after Maximilian I acquired the painting in 1613. A copy of this painting, now in Munich, made about 1550, shows the two donors without helmets and without the attendant horses and the landscape background. These additions by Fischer have now been painted out and the wings restored in accordance with what is conceived to be their original appearance. This second restoration is condemned by AUGUSTE MARGUILLIER in *Chron. d. Arts*, 1903, p. 52. See also *Athen.* February 21, 1903.

NUREMBERG.—**The Schreyer Monument.**—Hitherto two documents have been known which relate to the Schreyer monument by Adam Kraft in the Sebalduskirche at Nuremberg. One of these is the contract of September 11, 1490, and the other a receipt dated May 7, 1492. In the *Rep. f. K.* 1902, pp. 360-370, ALBERT GÜMBEL publishes a number of new

documents which give details concerning the construction of the monument and the date of its erection, and inform us that it was erected to replace an ancient painting.

AUSTRIA

INNSBRUCK.—*The School of Pacher.*—When the Art Historical Congress met at Innsbruck, September 15, 1902, an exhibition of Tyrolese painting was held at the same time. These paintings exhibited ideals and styles similar to those of Michael Pacher and form the subject of a study by ROBERT STIAFSNY in *Rep. f. K.* 1903, pp. 20-32.

VIENNA.—*The Portrait of Marguerite de Navarre.*—Marguerite de Valois, the sister of François I, is known to us by several portraits and engravings. All of these represent her in mature age. An inedited painting in the collection of the Counts of Brunswick, now in Vienna, represents her as about twenty-two years of age. The inscription, Marguerite de Navarre, 1500, may be a forgery, but the painting is ancient, although its author is not certainly known (*Chron. d. Arts*, 1902, pp. 319-320).

RUSSIA

NOVGOROD.—*Limoges Enamels.*—In the monastery of St. Anthony the Roman, near Novgorod, are four enamel plaques used as icons, one of which represents the Creation, and three represent Crucifixions. They were originally made as book covers, and are considered by competent critics to have been made at Limoges in the twelfth century. Two of them are published by Baron J. DE BAYE in the *B. Soc. Ant. Fr.* 1902, pp. 277-281.

ST. PETERSBURG.—*A Manuscript of Philippe le Bon.*—The rich collection of French manuscripts in the Imperial Gallery at St. Petersburg came chiefly from the collections of Messrs. Zaluski and Bubrowski, and has been made known by the publications of Hector de La Ferrière and Gustave Bertrand. In this collection there exists a splendid manuscript copy of the *Grandes Chroniques de Saint-Denis*, which belonged formerly to François Potocki and appears never to have been published. It consists of 442 pages, of which ninety-two are decorated with miniatures. These miniatures consist of twenty-five full-page miniatures and sixty-seven smaller ones, and appear to have been executed by four different hands. The frontispiece illustrates the presentation of the manuscript by the abbot of St. Bertin to Philippe le Bon, and is executed in a style which reminds one of Jean Van Eyck and his immediate successors. This important manuscript is now published by SALOMON REINACH in *Gaz. B.-A.* XXX, 1903, pp. 265-278. He believes that the miniatures were begun in 1454, and that the manuscript was presented to Philippe about January 1, 1458. The authorship of the principal miniatures is here assigned to Simon Marmon, who, in 1467 to 1470, executed for Philippe le Bon the miniatures of a celebrated Book of Hours.

ENGLAND

Elizabethan Wall Paintings.—At Rothamstead Manor House, in Harpenden, some interesting paintings, probably from the early part of the reign of Queen Elizabeth, have been found during the course of some repairs. The principal painting represents part of a battle scene, with cannon, behind which are a small troop of knights and probably a body of pikemen. (C. E. KEYSER, *Proceedings of the Soc. Ant.* XIX, No. 1, pp. 51-55; 2 pls.)

A Flemish Tapestry.—Mr. J. Pierpont Morgan has placed on exhibition at the South Kensington Museum a remarkable tapestry, which was formerly in the collection of Cardinal Mazarin. It is a Flemish work of more than usual magnificence, designed in the style of Memling. The central composition represents God the Father Enthroned; to his right are episodes from the History of Augustus and the Tiburtine Sibyl; to his left is represented the Story of Esther. (*R. Art. Chré.* 1902, p. 494.)

A Drawing by Holbein.—A strong portrait of a man, from a drawing by Holbein in the collection of the Duke of Devonshire, is published in the *Burlington Magazine*, 1903, pp. 223-225. It is a satisfaction to art collectors that the drawings by old masters in the collection of the Duke of Devonshire at Chatsworth have at length been published by Duckworth & Co., under the editorial care of Mr. S. A. Strong.

Three Unpublished Italian Portraits.—In the *Burlington Magazine*, 1903, pp. 185-186, HERBERT COOK publishes three Italian portraits. One of these is the portrait of Giacomo Doria by Titian, painted before the year 1523, as is indicated by the form of the signature, Ticianus. The second is a charming figure of a martyred saint by Bernardino Luini in the collection of Mr. A. W. Leatham. Mr. Cook thinks this may have been a portrait. The third is a portrait of the young Federigo Gonzaga by Francia, also in the possession of Mr. A. W. Leatham.

UNITED STATES

BOSTON.—**Acquisitions of the Museum of Fine Arts.**—The *Annual Report* of the Boston Museum of Fine Arts for 1902 shows that the important additions of the year are in the departments of modern art. Among the pictures acquired are a 'Pietà,' by Carlo Crivelli; 'Justitia' by Paul Veronese; five water-colors of Japanese subjects, by Joseph Lindon Smith; four very rare Japanese prints of the early part of the eighteenth century; a 'Portrait of William Locke, Esq.,' by Sir Thomas Lawrence; 'A Spanish Infante,' by Roybet; a 'Descent from the Cross,' by Gaspar Nigro; and eight paintings from the bequest of George W. Wales, including two examples of the 'Madonna and Child' of the Florentine school, two of the Sienese school, and a 'Ceres,' by William Page. Of unique importance is the valuable William Arnold Buffum collection of amber, which includes, besides many smaller objects, a tabernacle of the thirteenth century, of Baltic amber, decorated with figures of saints and groups in Sicilian amber, and ivory panels representing saints, bishops, the Scourging and Crucifixion of Christ, etc.; another tabernacle of the sixteenth century, in the shape of an altar, made of Baltic amber with carved ivory panels, and surmounted by a figure of the Madonna, and a Sicilian amber crucifix, supported by a base in the shape of a casket or reliquary. The cross is elaborately carved with scrolls and Cupids' heads. The figure of Christ and the two female figures at either side of the base are of opaque German amber.

CAMBRIDGE.—**Acquisitions of the Fogg Art Museum.**—The Museum of Fine Arts at Cambridge (Massachusetts) has recently received, in the form of an indefinite loan, a water-color drawing, by Turner; a large panel in tempera, by Fra Filippo Lippi; a panel signed by Giovanni Bellini; two Greek marbles, three Greek vases, and a number of Greek and Egyptian bronzes and terra-cottas. (*American Architect*, No. 1412, p. 18.)

American School
of Classical Studies
in Rome

CERTAIN SOURCES OF CORRUPTION IN LATIN
MANUSCRIPTS:

A STUDY BASED UPON TWO MANUSCRIPTS OF LIVY: CODEX
PUTEANUS (FIFTH CENTURY), AND ITS COPY CODEX REGI-
NENSIS 702 (NINTH CENTURY)¹

XI. ERRORS OF CONSCIOUS EMENDATION

The errors illustrated in the foregoing chapters were made for the most part unconsciously, and were the result either of wrong visualization or of the ignorance of the scribe. They show no attempt at deliberate alteration of the text, with the exception of the occasional omission of elements which the scribe did not understand. Examples of more or less conscious emendation on the part of these ninth-century scribes are, however, not wanting. As I have already said in the Introduction, there was no such wholesale tampering with the text as is to be found in manuscripts of the fifteenth century, which were not infrequently copied by scholars of the Renaissance, whose main aim was to produce a readable text. Lack of scholarship and a far from perfect knowledge of Latin prevented the scribes of R from undertaking any such systematic attempt at emendation; but the examples I shall give at the end of this chapter will show, I think, that Lindsay² underestimates considerably the extent of text alterations in ninth-century manuscripts when he says that the monk copyists confined their emendation to matters of punctuation and spelling. There are, of course, in R no deliberate interpo-

¹ Continued from p. 197.

² *Latin Textual Emendation*, p. 12.

lations of whole phrases or clauses, and no lengthy omissions; but conscious substitutions of one word for another, and alterations in the forms of individual words, are not at all uncommon. Such emendations are not of a critical nature, and almost all of them are entirely superficial in character. They are made, for the most part, without any careful study of the passage, or even of the sentence, in which they occur. In many of the passages so emended the text of P was perfectly correct, and the scribe's fancy suggested alterations which might, indeed, suit a particular part of a sentence, but which even the scribe himself would have recognized as nonsense, had he taken the trouble to read the passage over again. These emendations, made in the haste of copying, and due for the most part to the failure on the part of the scribe to understand the passages in which they occur, are, fortunately, not extensive, being confined to a single word, or to two words, at the most. The majority of them would still afford a clew for the reconstruction of the original reading, even if P had been lost.

During the time in which the scribes of R were engaged upon their copy, their work was supervised by one or more correctors, as is shown by the fact that errors which occur in the first quaternion of a scribe's work are frequently not repeated in the second. These correctors have also made slight emendations in many cases; but inasmuch as their corrections are of the same superficial nature as those of the scribes, I shall, for the sake of avoiding confusion, confine myself, in the present chapter, to the emendations which occur in the work of the scribes. Examples of the emendations of the correctors will be found in the next chapter.

Before proceeding to classify these errors of emendation, I shall first give a few examples of a general nature. XXIII, 40, 8 *caralis peruenturus erat ni manlius* obuio exercitu ab effusa eum populatione continuisset P. Here the scribe of R wrote *mannilius* for *ni manlius*, though he afterwards corrects the error. — XXV, 16, 5 *et iam altero anno* in magistratu erat P; *anno* was first written by the scribe of R, and then

changed to *hanno*, the word being regarded as a proper name.—XXV, 40, 4 *dispar ut causa earum ita condicio erat* P, *contio* R.—XXVI, 3, 5 *praeterquam quod omnibus probis onerabatur* P; in R the meaning is entirely changed by the writing of *probis honorabatur*.—XXVII, 42, 12 *consul ubi silentium* in castris . . . *cernebat* P, emended in R to *consulibus silentium*, etc.—XXVIII, 28, 7 *ubi si uos decedens confecta prouincia imperator relinquerem* P, *docendos* R.—XXVIII, 33, 15. Here the reading of P² is: *hispanorum cum neque pedes equiti neque eques pediti auxilio esset*. The scribe of R has written *neque acies peditia auxilio esset*.—XXVIII, 1, 13 *nihil enim paruum*, sed *carthaginis iam excidia agitabat animo* P. The scribe of R has written *eum* instead of *paruum*.—XXVIII, 37, 12 *cum in leges iurasset c. claudius et in aerarium escensisset* P. The words in italics were emended by the scribe of R to *et in aerarium es cecisset*. He seems to have supposed that the words had something to do with the hiding of money. The error may, however, be due to mental pronunciation.

These examples will suffice to show that the scribes did not confine themselves merely to alterations of spelling or punctuation, but have really tampered with the text. The superficial character of their emendations is apparent in each example. None of these passages present any difficulty whatever, and the text of P was perfectly correct. In the following list I shall give a few examples to illustrate the treatment of passages which were really corrupt.

XXIII, 42, 10 *nunc propraetoris unius et parui ad tuendam Nola praesidi praeda sumus* (*Luchs*). Here P has *propri* for *propraetoris*, an error arising out of the abbreviation *prop̄r*. This the scribe of R has emended to *proprii*, without any further attempt at making sense out of the passage.—XXVIII, 29, 2 *qui dolor quae ira incitavit?* (*Luchs*). This is corrupted in P to *qui doleraeuitae*. The scribe Ansoaldus has emended to *qui dolere uitae*, without any regard for sense, satisfied with having merely made Latin words.—XXVIII, 17, 8 *Carthaginensibus iniurias tanto minores acciperemus* (*Luchs*). The

reading of P is *manto minores*. This the scribe of R has emended to *mantonino res.* — XXVI, 51, 9 his ita incohatis refectisque quae quassata erant (*Luchs*). The reading of P¹ is *qua quassauerant* (*qua* deleted by P²). The passage is emended by the scribe Theodegrimū to: refectisque *aquas sauerant*.

On the whole, passages in P involving corruptions are either left as they were or, if altered, are dealt with in the manner of the above examples, where the scribes' sole aim seems to have been to make Latin words, and the sense does not apparently concern them at all. Small errors, involving spelling or the change of a single letter, are sometimes intelligently corrected, as, for instance, in XXIII, 35, 15 the correction of *ut tante* to *ut ante*; XXII, 20, 7 *periectas* to *perfectas*; XXII, 15, 8 *secutos* to *secutus*; XXVIII, 32, 1 *terfidiam* to *perfidiam*; XXIII, 48, 2 *ubique* to *ibique*; and XXVIII, 38, 5, where, for *consul comitiis perfectis* ad exercitum in Etruriam redit, P has *consul comitiis praefectis*, which is emended in R to *consul comitiis praefectus*, a correction which, though not right, at least displays some intelligence. But in the majority of cases where the scribes have made alterations it has been with the result of corrupting the text of Livy where it was correct, or of magnifying the error where it was corrupt. Fortunately, all of the emendations are on a small scale. The most common forms of errors of emendation which occur in this manuscript may be classified as follows:

(1) Alteration of the cases of adjectives and nouns. The scribes often altered one of two adjacent words in different cases to make it agree in case with the other, misled by the juxtaposition of the two words into supposing that they were related. Alterations of this kind are sometimes due to the unconscious repetition of the ending, but the majority are probably due to deliberate change. The scribe Ansoaldus was especially prone to superficial emendations of this nature.

Examples: XXVI, 25, 3 *uastatis proximis illyrici* in *pela-goniam . . . uertit iter* P, *illyricis* R. — XXVI, 39, 13 *ita in*

arto *stipatae* erant naues P, *stipato* R. — XXVII, 43, 9 exercitum urbanum ad narniam *hosti* opponant P², *hostem* R. — XXVIII, 24, 1 prouinciam omnem ac *maxime* longinqua eius turbauit P. Here R has *maxima*, to agree in form with *longinqua*. — XXVIII, 26, 1 per eosdem dies quibus haec *illi* consultabant P, *illis* R. The scribe seems to have had an impression that this pronoun was connected with *quibus*. — XXVIII, 29, 10 exercitus, qui *corona* contionem circumdederat P, *coronam* R. — XXVIII, 31, 6 suam quoque noxam pari *poena* aestimatam rati P, *poenam* R. — XXVIII, 33, 6 neque ex aduerso *tantum* inlati obuio obtriuere P, *tanto* R. — XXIII, 40, 12 ferme III et MCC *capti* et signa militaria VII et XX P, *capta* R. — XXV, 40, 6 socios ad retinendos in fide animos eorum *ferendoque* in tempore cuique auxilium adit P; *ferendoque* is emended in R to *ferendosque*, that it may agree with *animos*. In all these passages, with the exception of the last, the reading of P was perfectly correct, and the alterations of the scribes were made without any careful consideration of the sense.

Sometimes the case of a noun is altered owing to a failure to understand its real construction, e.g. XXVIII, 25, 4 ad quorum primum aduentum exasperati *animi* P. Ansoaldus has written *animo* in R. — XXVIII, 32, 10 priusquam *prouincia* decedat P, *prouinciam* R. The scribe apparently regarded *decedat* as a transitive verb. — XXVIII, 20, 11 prendere tribuni iuberent, ac iure sacrosanctae *potestatis* reducerent P. The scribe of R, not understanding the construction of *potestatis*, has written *potestates*. — XXVIII, 22, 2 classem in portu simulacrum et ipsam edentem *naualis pugnae* ostendit P, *nauales pugnae* R. — XXVI, 27, 10 consuli *leuino* capuam praetereunti circumfusa multitudo campanorum est P. The scribe of R wrote *consule leuino*, having probably in mind the regular formula for giving a date. — XXV, 40, 3 propter *excellencia* eius generis ornamenta P, *excellentiam* R. Here *excellencia* was not recognized as an adjective. — XXVI, 29, 2 *postmodo* P, changed to *postmodum* in R, owing to the fact that the scribe erroneously

regarded *post* as a preposition. — XXVI, 37, 6 *ad moenia urbis* P², *ad moeniam urbis* R. — XXVIII, 17, 14 *nunc omnis centuriones* militesque . . . *pleminios fecit* P. In this passage the scribe Landemarus did not recognize *omnis* as the accusative plural, and has written: *nunc omnis centurionis* militesque, etc.

(2) Alterations in the forms of verbs. The most common form of this species of emendation consists in changing the number of a verb in order to make it agree with a noun in a different number, which is erroneously supposed to be its subject, or with another verb in a different number.

Examples: XXIII, 22, 3 *arma quod impigre ceperint* laudare P. In R the scribe Fredeğ wrote *ceperit*, which was subsequently altered by a corrector to *coeperint*. — XXV, 40, 1 *marcellus . . . cum cetera . . . tanta fide atque integritate composuisset*, ut non modo suam gloriam sed etiam maiestatem populi romani *augeret* P, *augerent* R. The scribe was, perhaps, influenced by *composuissent*, the original reading of P¹, which was subsequently corrected to *composuisset*. — XXVI, 6, 4 *neque iam armati inrumpentibus romanis resistebant* quam quo porta ballistis scorpionibusque instructa missilibus procul hostis *arcebat* P, *arcebant* R. The reading is influenced, perhaps, by the number of *resistebant*. — XXVIII, 23, 4 *correpti alii flamma sunt, alii ambusti adflatu vaporis, cum receptus primis urgente turba non esset* P, *essent* R. The error is possibly due to *sunt* above. — XXVIII, 27, 14 *cum eo ipso non contenti, si pro tribunis illos haberetis fasces imperatoris vestri ad eos quibus seruus cui imperarent numquam fuerat* romanus exercitus detulistis P, *fuerant* R. — XXVI, 50, 7 *amicus populo romano sis et, si me uirum bonum credis esse, qualis patrem patrumque (sic) meum iam ante hae gentes norant, scias* multos nostri similes . . . *esse* P, *sciant* R.

Sometimes the tenses are changed without any adequate reason for the emendation. *E.g.* XXVIII, 25, 8 *habebat* P, is altered to *habet* in R. — XXVIII, 27, 9 *quantum opinio fefellit* P, *fallit* R. — XXIII, 22, 17 *nisi faciet* (*paci et Luchs*) *concordiae consulitis* P. The scribe of R has written the future,

consuletis, to agree in tense with the corrupt *faciet*.—XXVI, 31, 7 nec mihi ipsi congresso ad portas cum principibus responsum *dabatur* (*Luchs*). P has here *dabantur*, which is emended in R to *dabuntur*.—XXVIII, 14, 9 id quibus uirtutibus inducti ita *iudicarint* P, *iudicarent* R.—XXVI, 29, 2 quae sors . . . ita exanimauit sículos . . . ut comploratio eorum fleuilesque uoces et extemplo oculos hominum *conuerterint* et postmodo sermones praebuerint P, *conuerterent* R. In these last two examples the reason for the change was, apparently, the unfamiliarity of the scribe with the use of the perfect subjunctive; *praebuerint*, however, was allowed to stand.

The infinitive, especially if it was removed a considerable distance from the word upon which it depended, was not infrequently emended to a finite form of the verb, and the passive infinitive was sometimes carelessly changed to the more familiar active. *E.g.* XXII, 37, 4 quae ne *accipere* abnuant P; *acciperent* is the reading of R, the change being apparently due to the immediate proximity of *ne*.—XXVI, 2, 4 *rescribi* de frumento et uestimentis exercitus placuit P, *rescribit* R.—XXVI, 2, 14 *redis*se P, *redisset* R.—XXVI, 33, 8 *sacrificas*se P, *sacrificasset* R.—XXVIII, 24, 7 si debellatum iam et confecta prouincia esset, cur in italiam non *reuehi* P, cur in italiam *reuehit* R (omitting *non*).—XXII, 28, 6 *timeri* P, *timere* R.—XXVIII, 34, 11 *praestari* P, *praestare* R.—In XXVIII, 14, 12 the perf. indic. *acceper*e is altered to *accipere*.—XXVIII, 13, 8 ita enim *iussi* ab senatu erant P, *iussit* R.

(3) Another tendency toward emendation is to be found in the case of unfamiliar words, particularly unusual proper names. Similar words, with which the scribe was more familiar, were often substituted for the unknown word or expression.

Thus, in XXVIII, 26, 4, *indibilem*, the reading of P, is promptly changed in R to *indebilem*.—XXVI, 21, 11 *animaduersum* P, *annum aduersum* R.—XXVIII, 18, 8 *contaminare* P, *contra minare* R.—XXVIII, 33, 9 in *arto* pugna P; in *orto* pugna R, *orto* being the more familiar word.—XXVI, 25, 15 *iamphoryna* P, *iam horina* R. The correctors have also made

emendations of a similar nature. — XXIII, 9, 1 *t. otacilius* P, R¹; *tot acilius* is the emendation of a corrector in R. — XXIII, 9, 4 *noui ali* (= *alii*) *creati t. otacilius*, etc., P, *creauit otacilius* R¹, *creauit tota cilius* corrector. — XXIII, 3, 9 *crotoniatum*, the reading of R¹, being a strange word, is emended to *crotonia tum* by a corrector.

(4) The scribes of R, whose knowledge of the Latin of their own times was far from perfect, naturally found much that was difficult to understand in the Latinity of an author who wrote more than eight hundred years before their day. Expressions of an idiomatic nature, in particular, often proved a stumbling-block to them, and were therefore subject to emendation.

Examples: XXII, 16, 1 *quod uiae* inter bina castra erat P. The scribe of R, not understanding the expression *quod uiae*, emended it to *quot uiae*. — XXVIII, 17, 17 *neque ego exequi possum nec uobis operae est* audire P. Here the use of the genitive was not understood, and the scribe of R wrote *opera est*. — XXVI, 37, 3 *et in italia cum tarentum amissum damno et dolori . . . fuit* P. The dative not being understood, *dolori* was emended in R to *dolore* by a corrector. — XXIII, 3, 15 *locros omnis multitudo abeunt* P. The use of the accusative without a preposition was not understood, and *abeunt* is emended in R to *habent*. — XXVIII, 1, 14 *laelium in african praedatum mittit* P; *praedatum* was not recognized as the supine, and was emended in R to *praedatam*, to agree with *african*. — XXIII, 16, 19 *in aede libertatis quam pater eius . . . ex multalicia pecunia faciendam* curauit P. A corrector in R, not understanding the construction of *faciendam*, emended it to *facienda*, with the apparent purpose of making it agree with *pecunia*. — XXIII, 10, 2 *ut consules sortirentur* P, *ut consulibus sortirentur* R. — XXVIII, 25, 14 *ad suam cuique leuandam culpam* P; *ad suam cuique* is the emendation of the scribe of R. — XXIII, 8, 2 *eadem uos cura qua in aciem armati descenditis* P; *uos* is omitted in R, probably because the scribe did not understand the order of the words.

(5) The Carolingian scribe, in copying, rarely grasped the meaning of a long sentence as a whole, and was likely in con-

sequence, mentally, to divorce parts of the sentence from the whole, and to alter them to suit some idea suggested to him by the general meaning of the immediate context, or by a neighboring word, without any thought of how such alteration would affect the entire sentence.

An excellent example of this is XXIII, 4, 2 *hiero . . . uoluisse dicitur liberas syracusas relinquere, ne sub dominatu puerili per ludibrium . . . interiret regnum P.* Here Fredeġ, catching the idea of "boy" and "plaything," has, consciously or unconsciously, emended the words in italics to *pueri liber ludibrium*, supposing the passage to mean, "the book is the boy's plaything."—XXIII, 13, 4 *haunibal conlaudatos eos oneratosque ingentibus promissis . . . P.* The same scribe of R, taking his cue from *conlaudatos*, has emended *oneratosque* to *honoratosque*.—XXVIII, 37, 9 *itaque egressi nauibus super portum loco munito castra (locant om. P) ac sine certamine urbe agroque potiti, etc., P.* Influenced by *castra*, *certamine*, and other military expressions, the scribe of R wrote *signe* instead of *sine*.—XXVIII, 17, 9 *aut nos respicietis (respicietis Luchs) perditas res nostras P, recipietis R.*—XXIII, 1, 10 *cum poenus dolo dimissum romanum incusaret, locrenses profugisse ipsum causarentur P; incursaret* is the reading of R, the scribe evidently getting the idea of "attack" from *profugisse*.—XXVI, 41, 10 *quot classes, quot duces, quot exercitus priore bello amissi sunt! iam quid hoc bello memorem? (Luchs).* Here P had *quod* for *quot* in each of the places in which it occurs, and the scribe of R has emended the last part of the sentence to: *iam quod hoc bello memorem.*—XXIII, 1, 9 *ut foedus extemplo aequis legibus fieret P.* The scribe of R has emended *fieret* to *feret*, apparently with the expression *legem ferre* in mind.

XII. SPELLING AND PRONUNCIATION

In the four centuries which preceded the copying of R great changes had taken place in the pronunciation of Latin. The phonetic changes in the language which developed in Italy

itself, and those which arose in Spain, France, England, and Ireland, in the adaptation of Latin sounds to foreign tongues, were accompanied by corresponding changes in spelling, which varied more or less among the different nationalities (see Schuchardt, *Vokalismus des Vulgärlateins*). Naturally, the Latin texts felt the influence of these changes, and the spelling of the Classical Latin authors became reduced more and more, with every transcription, to the modes of spelling in vogue in the Middle Ages. Laxity of spelling also made it possible for words of different meaning to be confused, and gave rise to errors in the texts. It thus became necessary for the scholars of the last half of the eighth century to establish rules for the writing of such words as might be confused in this way. Of these treatises on spelling the best known is Alcuin's *de Orthographia*.

I have said that Alcuin was abbot of St. Martin's of Tours not more than thirty years before the *Reginensis* was produced in the scriptorium of that monastery. His treatise on orthography was intended, no doubt, for the guidance of scribes engaged in copying Latin manuscripts. It is natural to suppose that its influence would be felt to a greater degree in the scriptorium of his own monastery than anywhere else. We should, therefore, find in the *Reginensis* a practical illustration of the extent to which the treatise influenced the spelling in the texts.

In the *Puteanus* there was already a tendency to use the methods of spelling in vogue in the fifth century, such as *ae* for *e* and *vice versa*, the confusion of *u* and *b*, the omission of the nasals, etc. It can be seen, however, by glancing over a few pages of Luchs's edition, that many of the older forms, such as *aequom*, *aput*, *relicuom*, *obpugnare*, *urps*, etc., are faithfully preserved. In making their copy the scribes of R had three courses open to them: (1) to adhere closely to the spelling of the *Puteanus*; (2) to observe the rules of Alcuin as far as they went; or (3) to use the method of spelling to which the scribe had been accustomed. No one of the eight scribes consistently followed out any one of these three courses. A

given scribe will in one place leave an archaic word unchanged, in another place he changes it to the current mode of spelling. The same word is at one time spelled according to Alcuin's orthography, at another time it is spelled in a different way, by the same scribe. All of the scribes freely introduced the spellings to which they had been accustomed. One is, on the whole, surprised to find that the impression made by Alcuin's treatise was not greater. Its influence does not appear to any extent, except in the work of the scribes Nauto and Gyslarus. For instance, Alcuin directs that the plural of *mille* should be spelled *milia*, but most of the scribes spell it now with one *l*, now with two. With few exceptions, when they departed from the spelling of their original, they adopted the manner of spelling in vogue in their own day. This, too, varied among the different scribes,—a fact which points, no doubt, to local influences, and suggests the probability that they were not all Frankish, but that other parts of western Europe were represented. For instance, Fredeġ, Theogrimmus, Ansoaldus, and Landemarus use *ei* for *ti* indiscriminately, thus: *cerciores*, *sacietatem*, *precia*, *paciendo*, *nunciantes*, *inicium*, *tercius*, *iacencium*, *abrum-pencium*, *spacium*, *arcium* = *artium*, *inficiari*; and *vice versa*, *conditione*, *sotii*, *fatile* = *facile*, *prouintia*, *pretibus* = *precibus*, *supplitio*, *malefitio*, *tenatior*. One also finds *iessisset* for *gessisset*, and *agebat* for *aiebat*. This confusion is not so common in the work of the other scribes. Also, Fredeġ and Theogrimmus have a greater tendency than the rest to omit or wrongly to insert the aspirate.

I have already said that, in general, the practice of the scribes of R was to make the archaic forms of their original harmonize with the spellings in vogue in the ninth century. Such forms, for instance, as *aequom*, *haut*, *aput*, etc., were usually written *aequum*, *haud*, *apud*, respectively. Sometimes these archaic forms were left unchanged, and, strangely enough, all of the scribes now and then use the archaic form even when it does not occur in the original. On the page of the facsimile in Chatelain's *Paléographie des Classiques Latins* there happen to

be more than one example of archaizing. To judge from this single page, it might seem as though the tendency to archaize were common;¹ but I have made a collection of the cases in which the scribes had archaized, and found that such archaizing was quite rare and exceptional. I regret that the list is not complete, since I was able to cover not quite two-thirds of the entire manuscript; but it is sufficiently full to show that archaizing the spelling of words was not a common thing among the scribes. The list is as follows:²

XXII, 20, 8 oppugnatā P, obpugnatā R. — XXII, 22, 13 inquit P, inquit R. — XXII, 26, 4 haud P, haut R. — XXII, 29, 3 uelut P, uelud R. — XXIII, 35, 18 neclecta P, neclegta R. — XXIII, 36, 5 oppugnaret P, obpugnaret R. — XXIII, 36, 7 oppugnandae P, obpugnandae R. — XXIII, 49, 5 oppugnabatur P, obpugnabatur R. — XXV, 13, 5 comportatum P, conportatum R. — XXV, 20, 5 imminebat P, imminebat R. — XXVI, 1, 9 supplementum P, subplementum R. — XXVI, 4, 10 apud P, aput R. — XXVI, 25, 2 compulit P, conpulit R. — XXVI, 25, 13 composuerunt P, conposuerunt R. — XXVI, 30, 6 praeoptasse P, praeobtasse R. — XXVI, 30, 7 oppressis P, obpressis R. — XXVI, 37, 9 uelut P, uelud R. — XXVI, 40, 18 uelut P, uelud R. — XXVII, 40, 9 inquit P, inquit R. — XXVIII, 22, 14 suppressit P, subpressit R. — XXVIII, 28, 12 absumptis P, apsumptis R. — XXVIII, 33, 7 imminuti P², inminuti R. — XXVIII, 2, 12 immittendi P, inmittendi R. — XXVIII, 6, 6 redempti P, redemti R. — XXVIII, 6, 8 composuissent P, conposuissent R. — XXVIII, 6, 8 apud P, aput R. — XXVIII, 12, 19 conscripta P, conscribta R. — XXVIII, 13, 8 supplexmentum P, subplexmentum R. — XXVIII, 25, 4 immensum P, inmensum R.

Confusion in spelling is not in R a prolific source of corruption. Naturally, errors can arise only when the altered spelling of one word produces another Latin word, or where

¹ See an article by W. M. Lindsay in the *Classical Review*, 1896, p. 233.

² In the readings of P I have had to rely upon Luchs's silence.

the scribes of R have attempted wrong emendations in the belief that words in the original were wrongly spelled. The following is a list of the confusions in spelling to be found in R. Each case of confusion of letters or sound is followed by a list of errors of which it is the cause.

(1) The confusion of *e*, *ae*, *oe*. This is the most common of all. *ae* and *e*, in particular, are used without discrimination, as, indeed, is also the case in the *Puteanus*. The scribes write *predae* = *praedae*, *aequitum* = *equitum*, *poenatibus* and *paenatibus* = *penatibus*, *praelium*, *saenatum*, *gregae* = *grege*, *caedae* = *caede*, *urbae* = *urbe*, etc.

Examples of possible corruptions due to this cause: XXVI, 34, 2 *operae* praetium P, *opere* praetium R. — XXVI, 15, 10 infestis *signis ire* ad urbem pergit P, *signis irae* R. — XXII, 33, 8 aedem in *arce* faciendam locauerunt P, *arcae* R. — XXIII, 20, 2 eos *effuse* palatos hanno adortus P, *effusae* R. — XXVIII, 25, 6 suis *recte* factis gratia qui exsoluat P, *rectae* R. — XXVI, 49, 15 nunc ut id *curem* impensius, vestra quoque uirtus dignitasque facit P, *curae* R. The scribe did not notice the abbreviation for *m*. — XXIII, 49, 12 suppletis copiis ex *provincia*, ut *quae maxime* omnium belli cupida P, *prouinci aut quem axime* R¹. The scribe saw *quaem*, and supposed that it was an error in spelling on the part of the scribe of P. — XXVIII, 2, 9 dum *cedenti* duodecimae legioni . . . tertiam decumam legionem . . . firmamentum ducit P, *caedenti* R. — XXVIII, 30, 6 cum *lelius* et *ipse* in quinquere mi portu carpeiae . . . inuehitur P, *ipsae* R. This confusion of *ipse*, *ipsae* is one frequently made by the scribes of R. — XXVIII, 9, 9 pleminius impotens *irae*, *nelectam* ab scipione . . . suam iniuriam ratus P, *iraena et lectam* R. Here the scribe has seemingly resolved the first *e* of *nelectam* into *ae*, and then attached one letter to the first word, and the other to the second. Other examples of this nature have been already given in the chapter on wrong word-division.

As the result of writing *e* for *ae*, *que* is, in manuscripts of all periods, almost as common a spelling of the relative pronoun as

quae. The spelling *que* is, indeed, so common that few errors are likely to arise from it; but, on the other hand, scribes who wished to employ the spelling *quae* for the relative often went too far, and wrote *quae* for the enclitic *que*. This creates an opportunity for corruption, especially if the relative suits the context, and if, as was the case in R, the words were so divided that *quae* was written separately, and not attached to the preceding word. Examples of this kind of error are to be found on every page. I shall give only a few.

XXIII, 1, 7 *aduocataque* extemplo contione P, *aduocata quae* extemplo contione R. — XXVI, 33, 10 *sciretque* (*scisceretque Luchs*) plebs P, *sciret quae* plebs R. — XXVI, 33, 13 *deuina* (= *diuina*) *humanaque, utensiliaque* siue quid aliud dediderunt P, *utensilia quae* siue R. — XXVII, 39, 6 non enim receperunt modo aruerni eum *deincepsque* aliae gallicae atque alpinæ gentes P, *deinceps quae* aliae R. — XXVIII, 25, 5 *quae* causa ire consternationisque subitae foret P, *consternationis quae* subitae R. — XXIII, 39, 7 et nolae . . . plebs hannibalis erat, *consiliaque* occulta . . . inibantur P, *consilia quae* occulta R. — In XXV, 11, 15 *Luchs's* text has: *suas . . . eum claustra portus hostis haberet, quem ad modum* inde in apertum mare euasuras. For the words in italics P has: *haberet et que ad modum*. The *et* is probably due to dittography, and the *que* to leaving off the sign for the nasal. The scribe Nauto has added to the difficulty by writing *haberet et quae ad modum*.

(2) *o* written for *u*, and *vice versa*. Spellings such as *tulerantes, pupulatione, furtuna, uicture* (= *victore*), *ducendo* (= *docendo*), *expugnatoros* (= *expugnatueros*), *incolomi, ligorum* (= *ligurum*), *totum* (= *tutum*), *luxoria, moros* (= *muros*), *syracosanos* are not uncommon. The errors due to this cause consist chiefly in the confusion of the ending *-us* with the ending *-os*, e.g. *marimus* for *marimos*, *medius* for *medios*, *Romanus* for *Romanos*. Errors of this nature have already been treated under Emendation.

(3) Some of the other vowels are confused, though not so frequently.

i is sometimes written for *e*, and *vice versa*, e.g. *diadima* = *diadema*, *luciria* = *Luceria*, *delegestis* = *delegistis*, *itenere* = *itinere*, *uergis* = *uirgis*, *seculorum* = *siculorum*. Spelled *seculorum*, this word is likely to be confused with *saeculorum*.

a and *e* are occasionally confused in unaccented syllables owing to mental pronunciation. Examples are: XXII, 20, 4 *escensio* ab nauibus in terram facta P, *ascensio* R. — XXVI, 51, 3 ipse paucos dies . . . *exercendis* . . . copiis absumpsit P, *exarcendis* R. — XXVII, 41, 5 id modo romanum quaerere *apparebat* P, *apperebat* R. A corrector has changed *apperebat* to *appetebat*.

(4) The wrong insertion or omission of *h*. This creates many possibilities for error, owing to the confusion of such words as *aut*, *haut*; *ac*, *hac*; *iis*, *his* (the correctors in the manuscript have, in almost all cases, changed *iis* to *his*); *ostium*, *hostium*; *anno*, *hanno*; etc. Examples: XXVIII, 19, 8 quae piacula quibus *deis* quibus hostiis fieri placeret P, *de his* quibus R. — XXIII, 13, 4 *hac* cum spe dimissi tarentini P, *ac* cum spe R. — XXII, 24, 6 quia haud dubie hostis brevior uia praeuenturus erat (*Luchs*), *haud quia* dubiae hostibus P, *aut quia* R. — XXIII, 16, 6 metu poenae collem *haut* procul castris ceperunt P, *aut* procul R. This confusion is quite common. — XXIII, 20, 2 eos *effuse palatos* *hanno* adortus P, *effusae palatos anno* R. — XXIII, 14, 1 parte altera *hanno* . . . altera *ti*. *gracchus* P, parte altera *anno* . . . *alterati* *gracchus* R. — XXIII, 40, 8 ad *ostium* fluminis P, ad *hostium* fluminis R. — XXII, 39, 6 *ominis* etiam tibi absit c. flumini memoria P, *hominis* R. — XXVI, 26, 8 dilectum . . . per totam siciliam *habitum* P, *abitum* R. — XXII, 12, 7 et modo citato agmine ex conspectu *abibat* P, *habebat* R.

(5) Final *d* written for final *t*, and *vice versa*. This gives rise to such confusions as *at*, *ad*; *it*, *id*; *quot*, *quod*; *aliquot*, *aliquod*; *idem*, *item*; etc.

Examples of errors due to this cause: XXIII, 39, 13 ipse hibernacula . . . *communiit* aedificauitque P, *communi id* R. — XXIII, 33, 3 iouis it (= id) templum est P. In R the scribe did not recognize *it* as the other spelling of *id*, and wrote: iouis

sit templum est, which was, however, afterward corrected. — XXVIII, 26, 15 *sedit* tacitus paulisper P, *sed id* tacitus paulisper R. — XXII, 16, 1 *quod uiae* inter bina castra erat P². The scribe of R first wrote *quod*, and then altered so as to read: *quot uiae* inter bina castra erat. — XXII, 34, 10 quia inuitis iis *dictator esset* dictus P, *dictatores sed* R. — XXVIII, 24, 2 quantam excitatura molem *uera fuisset* clades P, *uerafuis sed* clades R. — XXVI, 38, 7 *at ille* . . . rem hannibali aperit P, *ad ille* R. — XXIII, 14, 9 *ad quae clamor cum ingenti adsensu est sublatus* is the reading of the texts. P has: *at quae clamor*, etc. The *at quae* of P has in R become *atque*.

The two errors which follow are due to a similar confusion of *p* and *b*: XXVI, 29, 8 conlege *optionem* dare provinciae P, *obitionem* dare R. Compare, also, *pueri liber ludibrium* in XXIII, 4, 2, where P has *puerili per ludibrium*.

(6) *b* written for *u*, and *u* for *b*. Spellings such as *uoleuat*, *pleuis* (= *plebis*), occasionally occur, but no corruptions have arisen in R from this cause.

(7) *ci* for *ti* before a vowel, and *vice versa*. This confusion in spelling was so common that few errors were likely to arise from it. I have found but one example of anything amounting to a real corruption from this cause: XXVIII, 12, 1 *nelectae* eo biennio res *in graccia* erant P, *ingratia* erant R.

(8) *i* for *g* before a vowel, and *g* for *i*. XXIII, 35, 4 *aiebat* P, *agebat* R. — XXII, 35, 7 *gessisset* P, *iessisset* R.

(9) The following errors are due to the confusion of the sound of *s* with that of *x*, and that of *c* before *i*: XXVIII, 2, 2 *ausetanum* P, *auxetanum* R. — XVIII, 21, 12 *onus demptum erat de scipione cognoscendi* P, *decipioni* R.

(10) In XXVIII, 29, 5, the texts have *arcessit*, P has *acces-sit*, and R has *accensit*. The error is due to the fact that *n* was not pronounced in the combination *ens*.

(11) The following error seems to be due to a confusion of the sounds of *l* and *r*, which gives rise to the spelling *fraglantia* for *flagrantia*: XXVIII, 28, 10 *nihil ultra facile creditam mortem meam a nobis uiolatus sim* P, *facere* R.

(12) The use of the double letter for the single, and *vice versa*, has already been treated under Dittography and Haplography. This is the cause of confusions such as *dimisi, dimissi*; *uelit, uellit*; etc. A good example of an error growing out of the repetition of a single letter is XXV, 41, 10 *ut claudius comitia perficeret* P, *ut claudius commitia perficeret* R. The unusual spelling caused the scribe of M to emend, and write *ut claudius commitiis perficeret*.

XIII. MISCELLANEOUS EXAMPLES ILLUSTRATING THE CUMULATIVE GROWTH OF ERROR

The examples given in the preceding pages have been chosen with the view of illustrating, in each case, a single stage of error in the process of transcription. For this purpose I have used, for the most part, only the errors actually made by the scribes who copied the *Reginensis*, disregarding the alterations made by the correctors, who corrected each quaternion as soon as it was finished. These corrections are, however, interesting in themselves, and show how the trifling mistakes of the scribes frequently grew into more serious errors in the superficial attempts of the correctors to make sense of the passages thus affected and to emend the blunders. The *Reginensis*, thus emended, was copied in turn, in the eleventh century, to produce the *Mediceus*, and this manuscript was subsequently corrected by several hands. The *Puteanus* itself had, before the *Reginensis* was copied, received corrections from two correctors, P², P³, in addition to those which were made in the manuscript by the scribe who copied it. Consequently, between the first readings of P, which were sometimes already corrupt, and the last corrections in M, there is sufficient latitude to exhibit several distinct stages in the growth of a corruption. It is the purpose of the following list of examples to illustrate this cumulative growth. Each of the errors here given has, in the hands of the scribes and the correctors of these three manuscripts, passed through at least two stages in the process of corrup-

tion, and some will be found to have passed through as many as five.

The examples are too varied in their nature, and too complicated, to admit of classification. I shall, therefore, arrange them in the order in which they occur in the text. For the present purpose it will not be necessary to distinguish the various hands of the correctors in R. Indeed, the variety of inks used would make it a difficult matter. I shall, therefore, give only the corrections which were already in R before M was copied. In the case of corrections in M, I shall also simply indicate that there was a correction, without specifying whether it was by M², M³, M⁴, etc. The corruptions in the following examples will be studied to better advantage with Luchs's critical edition in hand.

XXII, 28, 3 quem (*Luchs*); queeū P; que | eum R¹; altered to *quae eum* by a corrector.

XXII, 29, 2 proferte (*Luchs*); profere P; profere R¹; altered by a corrector to *proferre*, without regard for the sense.

XXII, 33, 1 qui per biennium *fefellerat, Romae* deprensus (*Luchs*). Here P has *fefellereat romae*, which is written in R as follows, *fefellere at romam*, the scribe understanding the *at* as the preposition *ad*.

XXII, 34, 2 ab Q. Fabio (*Luchs*); abq. fabio P; the scribe of R, not recognizing the *q.* as the abbreviation of *Quintus*, wrote *absque fabio*.

XXIII, 41, 6 deinde aliae *quoque* civitates (*Luchs*); quodq. P, R¹; altered to *quotque* by a corrector in R.

XXIII, 42, 3 ad id tempus *quo tu in Italiam* uenisti (*Luchs*). Here P¹ had *quodu in italiam*, corrected by P² to *quod in italiam*. The scribe of R, disregarding the correction in P, wrote *quod uenit aliam*, which was altered by a corrector to the correction in P.

XXIII, 42, 12 a quo tot acies Romanas fusas stratasque (strataque P, R) esse *sciam*, *ei* facile esse ducam (dicam P, R) opprimere populos nostros . . . (*Luchs*). By a double

confusion of letters P has in place of *sciam et* the words *suam et*, which were in turn copied into R; but the scribe has altered them to *sua et*, in order to make an apparent agreement with *strataque*.

XXIII, 43, 7 nihil enim Marcellus *ita egerat* (*Luchs*). For the words in italics P¹ had *itayerat*, which was emended to *ita agere at* by P². It was altered still further by the scribe of R, who wrote *itageruat*, and again, by a corrector, to *ita gerebat*.

XXIII, 46, 4 hostium plus *quinque milia caesa* eo die (*Luchs*). For this P had: hostium *plus uel causa* (altered to *caesa* by P¹, and *caesū* by P³) eo die. The text of R was here worked over to such an extent that the original reading is no longer to be recognized, but, after several alterations and erasures, the passage as it now stands is: hostium *plus uel caesa uel* eo die. The corruption *uel* probably originated in P from a confusion of a numeral and the abbreviation for *milia*, and the correction in R is therefore all the more absurd, the scribe having felt it necessary to add a second *uel*, without any regard for the sense.

XXIII, 47, 6 dicto prope citius equom in uiam *Claudius deiecit* (*Luchs*). Here P has, for the words in italics, *clā delegit*.¹ This is also the reading of R¹, but a corrector has altered it to *clā delegit*. The whole passage now stands in R as follows: dicto prope citius equum in cauam | uia *clā delegit*. The change to *equum* is by a corrector; but the insertion of *cauam*, from the context a few lines farther on, is by the scribe, who is also responsible for writing *uia*.

XXIII, 49, 2 ut *militia uacarent, dum . . .* (*Luchs*). Here the original reading of P was *mihiia uacarentum*. The successive stages in the progress of error are as follows: *mihi uacarent tum* P²; *mihi atarent tum* P³; *mihi tarentum* R¹; *mihi tarentum* corrector in R. The passage now reads in R: unum ut *mihi tarentum* in eo publico essent.

¹ Luchs has here an error in his critical edition, where he reports the reading of P as *cl. delegit*.

XXIII, 49, 3 res publica *administrata est. ii mores*, etc. (*Luchs*).

Here P has *administratast hi mores*. The scribe of R has written: resp. *administratasthimores*, which is corrected by a corrector to: resp. *administratas timores*.

XXIII, 2, 2 ad Crotonem oppugnandam pergunt *ire, Graecam* et ipsam urbem (*Luchs*). By a confusion of letters P has *ire gregā*. In R the scribe Fredeġ wrote *ire gregam*. This a corrector then emended to read *ira gregem*. A serious error is, by these various stages, created out of a very simple one.

XXIII, 4, 8-9 funus fit regium magis amore civium et caritate quam *cura suorum celebre*. *brevi* deinde ceteros tutores summovet Andranodorus (*Luchs*). For the words in italics P has *cura suorum celebrevi deinde*, the syllable *bre* being omitted by haplography. This in turn appears in R as *cur suorum celebrevi deinde*, and has been altered by a corrector to read *cura suorum celebre deinde*. The whole word *brevi* had thus disappeared by degrees.

XXIII, 12, 4 quodque ibi *praesidi* erat P¹; *praesidi* was altered by P² to *praesidiu*, and was thus copied by R¹, but the clause was altered by a corrector so as to read *quoque ibi praesidio erat*.

XXIII, 15, 4 *fortissimus* quisque *pugnator esse* desierat P; *fortissimus* quisque *pugnatores sedesierat* R¹. A corrector in R has written: *fortissimos* quisque *pugnatores sedesierat*, *fortissimus* being altered to agree with *pugnatores*.

XXV, 38, 22 *ite* dis bene iuvantibus P; *iste* dis bene iuvantibus R, M¹. The error is carried through a second stage by a corrector in M, who has corrected *iste* to *ista*.

XXV, 40, 6 huic ab epicyde *et hannone numidae* dati auxiliares P. The words in italics are copied into R thus: *et hanno nenumidae*. The *ne* was not understood, and was consequently omitted by the scribe of M, thus: *et hanno numidae*.

XXV, 40, 13 nam si muttinem opperirentur et secunda *pugnae* fortuna evenisset P. By wrongly spacing the letters of

the last three words, R has written *pugnae fortunae uenisset*, and it was thus copied into M. A corrector, however, has placed a dot over the *e* of *fortunae*, and would read *pugnae fortuna uenisset*.

XXVI, 2, 10 *Cumas Beneuentum aliasque urbes* (*Luchs*); *cumas beneuolentum* (*beneuentum post ras.*) *aliasque urbes* P. The scribe of R copied the passage as originally written in P, but a corrector has emended it so that it now reads: *cum ad beneuolentum aliasque urbes*.

XXVI, 3, 11 *negassentque patres e re publica esse* (*Luchs*); *negassent quae patres e re publica esse* P; *negassent quae patre se rep. esse* R¹; *negasset quae patre se rep. esse*, corrector in R and M¹. This a corrector in M has emended to: *negasset que utile rep. esse*. The passage has thus gone through four stages of corruption, the last of which is a case of wilful emendation unusual for the eleventh century.

XXVI, 5, 6 *nam alia parte ipse adortus est, alia campani omnes* P, R¹. A corrector in R, influenced apparently by the preceding word *alia*, emended to *campania omnes*, and the passage thus emended was copied by the scribe of M; it was further altered by a corrector in M, to read thus: *nam alia parte ipse adortus est, alia campani ac omnes*.

XXVI, 6, 15 *ne tu perditas res Campanorum narras* (*Luchs*). By a confusion of letters the first two words are written *notu* in P, and are thus copied by the scribe of R. A corrector in R has emended the passage to read: *noctu perditas res campanorum narras*.

XXVI, 28, 6 *et Q. Fuluius* Capua prouincia decreta (*Luchs*); *etque fuluius* P, R¹, the abbreviation for *Quintus* and *que* being the same. A corrector in R has emended to *aque fuluius*, and this is copied by the scribe of M. A corrector in M has altered the passage to read: *ac q. fuluius capua prouincia decreta*.

XXVI, 29, 8 *conlege* (= *conlegae*) *optionem* P; *conlegae obtionem* R; *conlegae obitionem* M¹. This error, now corrected in M, is due to the archaizing of spelling unusual in R.

- XXVI, 30, 11 *cum excedere ex templo . . .* Laeuinus iussisset (*Luchs*); *excedere et templo* P¹ (corrected by P²); *excederet extemplo* R¹; *excederet extimplo* corrector in R, and M¹; now emended in M to *excedere extemplo*.
- XXVI, 35, 2 *nec, ex qua* pararentur stipendiumque acciperent (*Luchs*); *ex aquam* (quam P²) P¹, R¹; the scribe of M has altered the case of *aquam* to agree with *ex*, and has written: *nec ex aqua* pararentur.
- XXVI, 36, 2 *sicut honore praestent ita* (ex *tita* P¹) ad omnia P; *praestet tita* R¹; *praestetit ita* corrector in R; *prestitit ita* M.
- XXVI, 36, 4 *nobismet ipsis primum imperemus* (*Luchs*); *primum peremus* P, R; *primum feremus* corrector in R.
- XXVI, 36, 6 *ut salinum* patellamque deorum causa habere possint (*Luchs*); *ut alinum* P¹; *ut alignum* P², R¹; *ut lignum* corrector in R, also M.
- XXVI, 39, 10 *tarentini ut recuperata urbe* ab romanis post centesimum prope annum arcem etiam liberarent P; *ut recuperat urbe* R; *ut recuperaret urbe* M¹; *ut recuperaret urbem* corrector in M,—a good example of superficial emendation.
- XXVI, 39, 12 *ut non missilibus tantum sed gladiis etiam prope conlato pede gereretur res* (*Luchs*); *quereretur* P; *quaeretur* R.
- XXVI, 39, 18 *mox praedae fuere Thurinis* Metapontinisque. ex onerariis, *quae cum commeatu sequebantur . . .* (*Luchs*); *mox praede fuere thurinis* metapontinisque ex onerariis *que cum meatu sequabantur* P; *mox praede fueret* (*fuerit* corrector) *hurinis* meta pontinisque ex honerariis *que cum meatus equabantur* R.
- XXVI, 40, 9 *et cum agmine iam in media urbis ac forum magno tumultu iretur* P; *tumultui retur* R; *tumultu retur* M¹; *tumultuaretur* corrector in M.
- XXVI, 40, 9 *ratus Hanno nihil aliud quam tumultum ac secessionem* (*Luchs*); *hannonaliud* P, R¹; *hanno. n. aliud* corrector in R; *hannonē aliud* M.

- XXVI, 40, 17 per latrocinia *ac* rapinam tolerantés uitam (*Luchs*); latrocinia *at* rapinam P; latrocinia *ad* rapinam R.
- XXVI, 41, 13 nullum iam nomen *esset* populi Romani (*Luchs*); *set* P; *sed* R, M.
- XXVI, 51, 6 remigium *classicique milites* tranquillo in altum euecti P; *clausicique milites* R¹. The error of the scribe, which was apparently purely accidental, has grown into a serious corruption in the attempt at emendation on the part of a corrector. The passage now reads: remigium *clausi civesque* milites, etc.
- XXVI, 51, 7 haec extra urbem terra marique corpora simul animosque ad bellum *acuebant*; *urbs ipsa* strepebat, etc. (*Luchs*); *acuebant* *urp. sipsa* P; *acuebantur p̄. sipsa* R¹; *acuebantur p̄. ipsa*, after erasure.
- XXVII, 42, 1 itaque excitus tumultu raptim ad hostem *copias* agit (*Luchs*). By a confusion of letters P has *coptas*; this a corrector in R altered to *captas*, but the correction is now erased.
- XXVIII, 26, 12 ut ultro *territuri* succlamationibus (*Luchs*); *ferrituri* P; *ferituri* R.
- XXVIII, 27, 11 ut *uenti et* aurae *cient* (*Luchs*); *et ueni et* P¹; *et uenti et* P²; *et ueniet* aurae R¹; *et uenietes* (= uenientes) aurae corrector in R.
- XXVIII, 1, 20 eum superesse unum ducem Romanis ceteris ab Hannibale *interfectis rebatur* (*Luchs*); *interfectis rebantur* P, R¹; this a corrector in R has wilfully emended to *interficiebantur*.
- XXVIII, 7, 5 cum equitibus Numidis *circumequitabat* urbem (*Luchs*); *circumequitib.* | *at* P¹; *circumequitat* P²; *circumeat* R¹ (now corrected to the reading of P²).
- XXVIII, 8, 11 tum quoque alio genere cladis eadem illa pecunia omnibus *contactis ea uiolatione* templi furorem obiecit (*Luchs*). By the confusion of the letters *t* and *i*, P has *contactis ea utulatione*. R¹ wrote *contracti se autulatione*, which has been altered by a corrector to *contracti se adulatione*.

XXVIII, 14, 14 *populus frequens dona deae in Palatium tulit, lectisterniumque et ludi fuere, Megalensia appellata (Luchs); magalesiia appellata P; megalesi iam appellata R.*

From the above examples it can be seen that these successive tamperings with what was originally but a slight corruption have occasionally led, in the end, to the restoration of the original reading; more frequently, however, they have led farther and farther away from it, so that, by the time a given corruption has passed through the hands of the corrector of the eleventh-century M, it may be beyond the reach of purely palaeographical restoration, and can only be emended by plunging boldly into the realm of conjecture, which may meet with as much or as little success, in restoring the actual words of the author, as the efforts of the various correctors in P, R, and M have had. These various attempts at emendation are for the most part superficial, and few of them are extensive, but they gradually accumulate into corruptions of considerable proportions, whose cumulative growth points pretty clearly to one of the reasons for the corrupt condition of manuscripts of the fourteenth and fifteenth centuries.

[Concluded.]

F. W. SHIPLEY.

THE SUPPLEMENTARY SIGNS OF THE GREEK ALPHABET

THE following remarks about the supplementary or complementary signs of the Greek alphabet have to do primarily with the letters Φ χ Ψ and with the question of their "Eastern" or "Western" origin, arrangement, and equivalence. Discussion of these signs may justly begin with a paragraph near the end of Professor Kirchhoff's *Studien zur Geschichte des Griechischen Alphabets* in which the question at issue is put with admirable clearness — a paragraph which appears in the same words in the fourth edition of the *Studien* (1887) as in the first (1863). "Since the new signs χ Φ Ψ ," says Professor Kirchhoff, "notwithstanding their (in part) fundamental difference of signification and their varying arrangement, are yet in both groups [*i.e.* in the "Eastern" and in the "Western" alphabet] obviously identical in form, and since this cannot possibly be the result of accident, we must assume that they were invented, if not contemporaneously, as it should seem, at all events at one and the same place, from whence they were disseminated. Consequently, since we cannot attribute to those that were used with different values a double signification from the very beginning, one of these significations is the original; the other, that which arose later by arbitrary alteration. Furthermore, since the varying sequence of the Φ and χ in the alphabets of the [two] several groups stands plainly in a causal connection with this change of signification of the χ , this variation too can only be explained on the assumption that the one arrangement is to be regarded as the original; the other, as the altered and

secondary. The problem reduces itself to this: Which of the two groups is to be held to represent more faithfully the original condition, the Eastern or the Western? "¹

In the next paragraph — the last of the text proper of the *Studien* — Professor Kirchhoff in his first and second editions declared himself inclined to favor the Western origin of the signs. In the third and fourth editions he says instead that, important as the solution of the problem is for other questions concerning the development of Greek civilization, he does not believe that the epigraphical data at our disposal afford a sufficient foundation to build upon either way; therefore he prefers to reserve his decision in awaiting further epigraphical discoveries. That he still inclines — or until lately inclined — to believe in the Western origin of the signs in question might be inferred from his still in the fourth edition citing them in the Western order; but the inference would, perhaps, be an unfair one.

In what follows I shall endeavor briefly to examine what has been done in the way of discussion and discovery toward the solution of the problem indicated above from and during the year 1886, in which year the fourth edition of the *Studien* went to press.

In an article on 'The Early Ionic Alphabet' in the *Journal of Hellenic Studies* for 1886 (pp. 220-239) Mr. Ernest Gardner

¹ Da nun die neuen Zeichen $X \Phi \Psi$, trotz ihrer zum Theil grundverschiedenen Bedeutung und abweichenden Anordnung, identisch sind und dies unmöglich zufällig sein kann, so müssen wir annehmen, dass sie wahrscheinlich gleichzeitig, jedenfalls aber an einem Punkte ursprünglich zuerst erfunden sind und von da sich verbreitet haben, folglich, da den in verschiedener Werthung gebrauchten eine doppelte Bedeutung nicht gleich von Anfang an kann beigelegt worden sein, die eine die ursprüngliche, die andere die durch willkürliche Änderung erst später entstandene ist. Da ferner die abweichende Folge des Φ und X in den Alphabeten der verschiedenen Gruppen mit diesem Wechsel der Bedeutung des X offenbar in einem ursächlichen Zusammenhange steht, so lässt auch diese Abweichung sich nur so erklären, dass die eine Ordnung als die ursprüngliche, die andere als die abgeänderte und sekundäre betrachtet wird. Die Frage ist nur, welche von beiden Gruppen als diejenige zu gelten hat, die den ursprünglichen Zustand am treuesten darstellt, die östliche oder die westliche. (*Op. cit.* pp. 173 sq., 4^{te} Auflage.)

treated the symbols Φ χ Ψ as Ionic and transmitted from East to West (p. 236). "It is a recognized rule," says he (pp. 236 sq.), "to which there are few exceptions, that the symbols of any one alphabet borrowed at one time from any other alphabet, invariably preserve the order they held in that other alphabet; and that new symbols, whether produced by independent differentiation or by fresh borrowing, are placed at the end in the alphabetic order, or next to the symbol from which they originated, as our own J, V, W. But this is only possible when the symbols are not also used as numerals in their alphabetic order. If we apply this rule to the last symbols of the Western alphabet, $+$, Φ , Ψ , we see at once that they cannot be derived from the Ionian Φ , $+$, Ψ . If we take the last two letters only, Φ , Ψ , there is no objection to meet as regards order. Hence $+$ must have been there before. Now this $+$ is used with the signification of ξ , but in these Western alphabets the alphabetic place of the Phoenician samekh and the Greek ξ is filled by a symbol evidently borrowed from the Phoenicians, but for practical purposes disused, \boxplus . Evidently what had happened here is the same as what we find in the case of ζ and ν . The Phoenician symbol is borrowed, and falls into practical disuse; but a secondary symbol evolved from it is placed at the end of the alphabet, and continues to hold its place in writing. Thus \boxplus survived as a symbol only, but $+$, its simplified form, continued to live and to represent the sound ξ . And the new form was naturally placed at the end of the alphabet. Now when the Western Greeks, already possessing this symbol, came to borrow from the Ionians Φ , $+$, Ψ , they could not adopt the $+$, simply because it was identical with the symbol they already possessed, and used to denote ξ . But the other two they borrowed, and put after their $+$ at the end of their alphabet; Φ they retained in its original form; but for the guttural aspirate they needed a sign far more than for the combination $\pi\sigma$ and accordingly they made the other new symbol, Ψ , serve to denote that sound."

The words just quoted form perhaps the most valuable part

of Mr. Gardner's article, albeit the part least heeded, it would seem. Whatever may be thought of his derivation of Western \div from \boxplus , his assumption of an entirely independent Western \div and his explanation of the arrangement of the supplementary signs of the Western alphabet as due to a grafting of the Eastern Φ χ Ψ upon an alphabet already possessing besides the A . . . V series an added symbol $\div = \xi$ are at once bold and shrewd. But the lack of epigraphical evidence of the borrowing or adoption by one section of the Greek race from another of alphabetic signs with changed value left Mr. Gardner's theory in the position of other guesses at truth, viz. in that of mere conjecture. The epigraphical evidence required to give it higher rank was ten years in coming. In the meantime several other people tried their heads and hands at the problem.

Before taking up Mr. Gardner's successors we should note an important publication closely preceding his. Professor von Wilamowitz-Moellendorff in his *Homerische Untersuchungen*, published in 1884, gave it as his plain opinion (*op. cit.* p. 289) that the supplementary signs in question were of Ionic origin. Φ and χ he would derive from \boxplus . (Lenormant and Taylor had so derived Φ .) Ψ he thought a differentiation of Υ (in this coinciding with Clermont-Ganneau). "When this expanded alphabet came to the mother-country, Φ was received with unanimity, but the cross seemed rather a development from samekh than from \boxplus ; so it was employed for $\chi\sigma$, and Ψ for χ ; $\phi\sigma$ either received no special sign, or else a new and not very successful one." Mr. Gardner writes as though he did not know of this theory. We turn now to the later writers.

In a short article entitled 'Zur Geschichte des griechischen Alphabets,' published in the Athenian *Mittheilungen* for 1890 (pp. 235-239) and dated from Vienna in the preceding year, Emil Szanto set forth a rather fantastic theory about the signs we are considering. Starting with the theory broached by Professor von Wilamowitz-Moellendorff (as above), Mr. Szanto says that

it requires the assumption of the existence of a samekh with the value of ξ in the Western group at the time of its assumed act of borrowing from the Eastern. Besides, the influencing of one alphabet by another in such wise as to produce an unhomogeneous result seems to Mr. Szanto improbable. His own theory is as follows:

Φ is common to both groups in the same signification. It must be older than the division into groups. This no-group stage of the Greek alphabet is represented by the Theraean alphabet, which must have been the common Greek alphabet. [It may be fairly asked on what grounds a purely local alphabet can be called "gemeingriechisch."] The Theraean alphabet expresses the aspirates by $\otimes H$, $K H$, and ΓH , and ξ and ψ by $K M$ and ΓM . The analogy is disturbed by $\otimes H$ for ΘH , but there is no real difficulty; for both theta and tau are Phoenician. But as $\otimes H$ was written for ΘH , so ΦH and $X H$ could be written after the invention of Φ and X to denote the aspirates, an apt mode of expression indeed if the sounds were affricates. The Numasios inscription seems to support the view that this was done. If that be so, there was once a stage of the common Greek alphabet at which the aspirates were denoted by $\otimes H$, ΦH , and $X H$, which gave way later (at least in the East) to simple \otimes , Φ , and X . — The oldest expressions for ξ and ψ were $\kappa\sigma$ and $\pi\sigma$. Between these signs and the Ionic stand the Attic $\Phi\xi$ and $X\xi$. [These should be rather $\Phi\varsigma$ and $X\varsigma$.] These are therefore relics of a once universal mode of writing. The Attic alphabet must not be regarded as an isolated phenomenon. From the Naxian $\Theta\varsigma$ we can infer that at a time when X was as yet non-existent and the expression $\chi\sigma$ was therefore impossible, the expression $\theta\sigma$ appeared more adequate than $\kappa\sigma$. So we have to reconstruct a common Greek alphabet in which θ is = $\otimes H$, ϕ = ΦH , χ = $X H$, ξ = $X\xi$, ψ = $\Phi\xi$, in which, therefore, the newly invented signs Φ and X had already either the value of ϕ and χ , or one very near it, one that could be rendered equivalent to it by the addition of an aspiration. [It is pretty hard to understand

what this sound might have been like.] H was soon dropped after Θ . Next came the attempt to simplify the other four double signs. This was done by dropping the second element. So X could be either χ or ξ (from XH or from X ξ). Both were tried. Hence arose the double equivalence. Owing to the great territorial extension of the Greek alphabet at this time geographical groups were formed. The Eastern cancelled H and gained a χ but lost a ξ , which was supplied by samekh. The Western cancelled ξ and gained a ξ but lost a χ . So in the case of the labials: in the East they got a Φ by cancelling H, but had to differentiate a Ψ out of Φ . In a similar fashion they could have got a ϕ in the West. But then ψ was not felt as a monophthong; so ϕ was gained as in the East. But a growing yearning for a χ led to the borrowing of the Eastern ψ to supply the want. "This solution," says Mr. Szanto, "presupposes a unity of the Greek alphabet until the time of the giving up of the four double letters and their replacement by single signs, likewise uniform adoption of the idea of employing the simple signs for these sounds; from this point, however, the ways part, and finally a sign is borrowed from the East for the West."—The varying arrangement of the signs in East and West can be easily explained. The two aspirates might be placed first, the two double consonants second; or the two gutturals first, the two labials second. In the East, the former arrangement was followed; but inasmuch as samekh, keeping its place in the alphabet, was used for ξ , only $\phi\chi\psi$ stood at the end. In the Western alphabets that have $\xi\phi\chi$ the aspirates follow the double consonants; in those that have $\phi\chi\xi$ either the principle of juxtaposition of labials and gutturals is followed or that of grouping aspirates and double sounds. In either grouping the labials have the precedence.

There are some "spunks of sense" in all this, but they are not enough to set the river afire. The theory found small favor with the next disputant, Ernst Kalinka, who, in an article, 'Eine boiotische Alphabetvase,' in *Ath. Mitt.* 17

(1892), pp. 101-124, dated from Florence, November, 1891, disagrees with Mr. Szanto in many things. He too doubts whether any part of the Greek race borrowed a number of signs from another in such wise as to leave to one sign its original signification, while giving to others an entirely different value. But the pleonastic Θ Ξ and χ Ξ are not found [Mr. Kalinka sets aside the proof of the existence of the former derived by Mr. Szanto from Nicandre's inscription] and Θ was not a dental aspirate. He finds it hard to believe that two signs were invented that were intended never to be used singly but always in connection with another sign. The $+$ in its position after ν , which is peculiar to the Western Greeks, belongs to the earliest period of the separate development of the alphabet. The aspirate group Φ χ was next added. The East went a step farther in adding ψ . The earliest step to the independent development of the Greek alphabet was the Ionic mutation of value of samekh to ξ . Samekh was dealt with as the vowel signs and zayin had been dealt with. $\kappa\sigma$ was written in Ionia before ξ came into use. In Attica ξ was not introduced because of a difference of pronunciation. But $\pi\sigma$ and $\kappa\sigma$ were not adequate representations of the sound. Therefore, the Attic Greeks invented Φ and χ , the former out of Θ , the latter out of χ . The Western Greeks did not accept χ : they had that sign in use already in a different sense. But they realized the value of a sign for the guttural aspirate; so they made Ψ out of koppa (an abbreviation of Ψ Θ) by cutting off its top. The new sign naturally grew more angular [perhaps withering after its top was cut off like the cabbage-palms in the *Anabasis*]. The East made Ψ out of the Athenian Φ Σ .

In the same year with Mr. Kalinka's rather remarkable article, but too early to take notice of it, appeared Dr. Wilhelm Larfeld's treatise on Greek epigraphy in von Müller's *Handbuch* (dated 1891). Dr. Larfeld, on more than doubtful grounds, would carry back the Ionic — more precisely, the Milesian — alphabet, including Ω , to 800 B.C. Φ χ Ψ are to him of Eastern — more precisely, Milesian — origin and are

derived from koppa, tau, and ypsilon respectively. Their position answers to the order of those signs. The Western arrangement $\xi \phi \chi (+ \varphi \psi)$ is a mechanical and unmotivated suffixing of the Eastern signs. The failure to take over the Eastern signs directly is due to difference of pronunciation in the West.

In 1893 W. Schmid published in the *Philologus* (52, pp. 366-379) a paper 'Zur Geschichte des griechischen Alphabets.' Starting with adverse criticism of Szanto, the author goes on to say that the testimony of the inscriptions forces us to the conclusion that ϕ was invented to express ph (spirant). So χ to express ch (spirant). We must, he says, assume the following principles [better, principle and corollary] in judging any alphabet properly so called: (1) Each sign = a vocal atom (Lautatomon). (2) This applies to signs derived from a foreign alphabet and *a fortiori* to those that are newly invented in the alphabet in question. The history of the alphabet cannot be separated from that of sounds and dialects. Simple signs for the aspirates were used when the aspirates approximated the fricatives. χ and ϕ were spirants. The change of aspirates to spirants in Greek goes hand in hand with the repression of the independent aspirate. The consummation of the process appears in modern Greek, the most important phonetic peculiarities of which were almost all developed before our era, but were hidden under the crust of conventional literary speech and spelling. So we may assume, continues Dr. Schmid, that the spirant pronunciation of the aspirates arose where the *spiritus asper* first gave way, i.e. among the Aeolians and Ionians of Asia Minor. The invention of ϕ and χ was the first alphabet innovation in the Eastern alphabet group. That is proved by the alphabets of Asiatic affinities that show ϕ and χ , but not ξ and ψ , viz. the Attic and the Naxian. Next came the invention of the signs for the assibilates. To ξ the arbitrary value $\kappa\sigma$ was assigned. The assibilates were introduced before the seventh century. In the Western group of alphabets χ was not taken from the

Eastern, but independently developed ($= \kappa\sigma$). This was felt as the first desideratum in the West. It is to be noted that the Western group is prevailingly Doric. KM at Thera and Melos may perhaps indicate that the aspiration before σ disappeared early among the Dorians. The coincidence in form in $+$ between East and West is purely accidental. "Already in possession of an alphabet of twenty-four signs, the Western group became acquainted with the three new inventions, Φ χ Ψ , of the Eastern group. $\chi = \text{ch}$ they could no longer use; for they had it, or a sign very like it, already in use for ks . Only Φ and Ψ were available. Φ was accepted with its Eastern value; but an expression for ps was not needed, and to Ψ was given the value of ch ."¹

Thus far the discussion of the problem has proceeded without fresh epigraphical discoveries. It has been somewhat complicated by the introduction of the question of pronunciation, but all the disputants have favored more or less the sonant pronunciation of ϕ and χ —Dr. Schmid most emphatically. In an article entitled 'Die sekundären Zeichen des griechischen Alphabets' published by Dr. Paul Kretschmer in the *Ath. Mitth.* for 1896 (pp. 410–433) and dated "Berlin, Dez. 1896," a new theory is proposed and, better still, a new epigraphical discovery is utilized, though not so fully as it might be.

With Szanto Dr. Kretschmer agrees in one point: he, too, would make χ a simplified $\chi \approx$ (p. 426). But he arrives at the former sign by a different way. In opposition to Schmid, he seeks to prove untenable the view that ϕ and χ could represent spirants at the time of the invention and propagation of the secondary signs (pp. 412–420). In this he believes he has succeeded. He next discusses the question, why the Greeks felt the need of a ξ . In the Naxian sign \square [which, and not Θ , the stone shews] he sees, with Kalinka, a guttural

¹ I may note here that Dr. Schmid's explanation of the place and manner of the introduction of the spirants ("aspirates") is *a priori* both reasonable and natural, and appears to be the only one that suits the facts.

spirant — or, at any rate, a guttural that was neither κ nor χ [the latter being an aspirate in his view]. So in the Rhodian Euthytidas inscription (*I. G. Ins.* I, 709) he sees in $X\xi$ not $\xi\sigma$, but a guttural, like the Naxian \square , plus a σ . He would place Boeotian $+\varsigma$, which occurs side by side with $\Psi (= \xi)$, on the same footing as Rhodian $X\xi$. It is plain, Dr. Kretschmer thinks, that in general ξ was not $= \kappa\sigma$. Was the X or Ψ of $X\xi$ and $\Psi\xi$ aspirate or spirant? $K\Theta M$ does not occur at Thera: only KM . But if in $X\xi$ the X is spirant, Φ should be spirant in $\Phi\xi$. But we have no proof of such a pronunciation of ψ , and Eastern $+\varsigma$ side by side with $\Psi\varsigma$ is against it. ξ and ψ are not, in Dr. Kretschmer's view, parallel. ξ is $= khs$ passing to guttural spirant plus s . Thus, Dr. Kretschmer thinks, we have got the key to the mystery. "We are brought to an alphabet in which χ is represented by Ψ , as in the later Western alphabets, and the guttural of ξ by X , as in the Eastern alphabets. This alphabet leads forward to the Western series: $X\xi$ could be abbreviated to $X = \xi$, inasmuch as the guttural spirant occurred only before σ , and the omission of sigma, therefore, would cause no misapprehension." Again: "The Eastern alphabet with X for both χ and the guttural element of ξ represents the older manner of writing. Since the guttural element of ξ was spirant, or became so, the necessity arose of distinguishing this spirant from kh also in writing. At Naxos a variant of Heta was employed for the guttural spirant. In the West a new sign for the aspirate (Ψ) was invented that was diffused over most of continental Greece, and was carried also to Rhodes, Sicily, and Italy. In the East the quiescent samekh was employed for ξ . In Attica and in most of the Cyclades the old style was maintained." In the alphabets that employed ξ the phonetic group ps (phs) received a special sign for symmetry's sake, viz. the Western $\Psi = \chi$. We have epigraphical proof (presently to be given) that a letter could be borrowed by one alphabet from another with change of value; and as for the inexact analogy of ξ and ψ , we know that Archinus compared ψ with ξ and ζ in recom-

mending to the Athenians the introduction of the Ionic alphabet (Aristotle *Metaph.* 1093 a; Syrianus *Schol. Aristot. Metaph.* p. 940 b). The less frequent use of ψ also shews that less need of it than of ξ was felt. As for the arrangement of the supplementary signs, that has a phonetic basis. The aspirates always stand together. The original order was the Eastern. Ψ was added to ΦX . "In the West the newly invented aspirate sign Ψ must, on account of the phonetic principle, stand after Φ ; X was placed either before the aspirates ($X\Phi\Psi$ in the Chalcidian and Boeotian alphabets) or behind them ($\Phi\Psi X$ in the Achaean alphabet)."¹

¹ I have thought it well to present here in a footnote some further notes on the first part of Dr. Kretschmer's important article. Dr. Kretschmer sets aside the discussion of the formal development of the supplementary signs (p. 411). He does so, it seems to me, with too great flippancy. The matter is one of great importance. His arguments for the aspirate *versus* the spirant pronunciation of ϕ and χ (pp. 412-420) are not convincing. These do not represent the view of all philologists competent to deal with the subject; and even Dr. Kretschmer, as will have been observed, has to make a concession to the opposing view in the case of his combination of χ with sibilant. *It is this obstinate aspirate theory that stands in the way of the acceptance of so simple an explanation as that of Dr. Schmid, and forces upon us some very tortuous argumentation* A MINUS PROBABIL. Dr. Kretschmer's discussion of the reason for introducing a simple sign for ξ (pp. 421 *sqq.*) is not convincing, nor very consistent. His view of Naxian $\square \geq$ seems very forced. The Naxian $\square \geq$ was, I venture to think, developed before the introduction of the Ionic X . Dr. Kretschmer says (p. 424) that only the fact that at Thera $K M$, and not $K \Xi M$, is written is against the aspirate pronunciation of X (and $\Psi = \chi$). He says further (*ibid.*) that the fact that if $\chi \sigma$ is = guttural spirant + s, $\phi \sigma$ must be = fs is a grave objection to the view that the character in question is = guttural spirant. Dr. Kretschmer's statement (p. 424) that "die verschiedene Behandlung von ξ und ψ in den westlichen Alphabeten — für ersteres giebt es ein besonderes Zeichen, für letzteres im Allgemeinen nicht — weist darauf hin, dass diese Lautverbindungen nicht genau analog waren" falls to the ground, if the theory of a grafting of Eastern alphabet on Western that I with others maintain is correct. Dr. Kretschmer assumes (p. 426) an alphabet in which χ is expressed by Ψ , "wie in den späteren westlichen Alphabeten, und der guttural von ξ mit X , wie in den östlichen bezeichnet wird." But this "missing link" nowhere appears. "Vorwärts," continues Dr. Kretschmer, "führt dieses Alphabet zu dem Zustand der westlichen Reihe: $X \Xi$ konnte zur $X = \xi$ abgekürzt werden, weil der gutturale Spirant nur vor σ vorkam, also kein Missverständnis entstand, wenn man das sigma wegliess." This is surely a clumsy process. Is it like the Greeks? Dr. Kretschmer believes (p. 429) that the Aeolians "in archaischen Zeit, d. h. vor Einführung des ionischen Alphabet, das Zeichen X im Sinne von χ verwendet haben." Surely

In the concluding section of his paper (pp. 430-433), Dr. Kretschmer discusses the archaic inscriptions found by Hiller von Gärtringen at Thera in 1896 (see *Ath. Mitth.* 21 [1896], p. 252 sqq., and the *Inscr. Gr. Insularum*), in addition to those that were previously known, and sums up our knowledge about the development of the Theraean alphabet. The first period has \beth [\beth] = β (confirming by several examples Professor Collitz's view), ζ = γ , θ = h and η , \otimes (twice $\otimes \theta$), ς or S = ι , Γ = λ , φ = q , M = σ , $\Gamma \theta$ = ϕ , $K \theta$ or $\varphi \theta$ = χ , KM = ξ , and ΓM = ψ . But we can infer from a few examples, to be regarded as sporadic survivals, an earlier stage at which, as in Crete, K and Γ are = χ and ϕ respectively and Ξ is = η (cf. $\varsigma \wedge \beth \theta$ in the Abron inscription). The use of θ for η comes from a psilotic region — Crete or Ionia. It is not native to Thera. In the second period we have \otimes , ς = ι , and M = σ (koppa too is found), but the Ionic aspirates [as Dr. Kretschmer calls them, although Ionia is to him a psilotic region] Φ and X have been introduced. We find also (perhaps more modern [though the reason for this designation is not plain]) ξ represented by Ψ in $\begin{smallmatrix} \Lambda \Lambda \Xi \Psi \Lambda \\ \text{COR} \Lambda \end{smallmatrix}$, to be read $\Lambda \lambda \epsilon \xi \alpha \gamma \acute{o} \rho \alpha$. There are also (cf. *Ath. Mitth.* 1896, p. 221) one or two inscriptions at Melos with the same peculiarity. The solution of this puzzling use of Ψ is to be found in the use (testified to by these [four] Theraean inscriptions) of Ξ for ζ . There are also examples of I = ζ , but they would probably be due to influence from without the island.¹ Dr. Kretschmer thinks (p. 433) that we have in this peculiar manner of writing proof that the Theraeans (and perhaps, too, the Melians) used the sign of samekh for ζ . [Would it not, I venture to suggest, be better to class the zeta with three horizontal bars with the four-barred epsilon that is

this is wrong in expression, whatever may be the fact, inasmuch as X = χ is Ionic.

¹ $\Xi \otimes \Gamma M$ = *Zeús* appears twice at Corinth (Kretschmer, *Ath. Mitth.* 22 [1897], p. 343 sq.).

found in Boeotia?] "So when the secondary signs of the Ionic alphabets," he concludes, "became known in Thera, the Theraeans took over the aspirate signs Φ and X for ϕ and χ without change; but inasmuch as Ξ was still used among them for ξ , and, for the reason previously given, they had no need of a special sign for ψ , they changed the value of the Ionic sign for ψ to that of ξ . That happened at Melos too, unless the $\Psi = \xi$ there is a Theraean importation. The great value of this fact appears to me to lie in this, that the change of the Western $\Psi = \chi$ to the Eastern value ψ thus becomes really plausible."

This contains an important element of truth, but we may draw further and, I venture to think, sounder conclusions. In the change of value of Ψ at Thera we see the result of a deliberate attempt on somebody's part to introduce into the Theraean alphabet the shorthand Ionic symbols for the double consonants and the spirants in addition to the signs already there. The procedure must, it seems to me, have been as distinct and deliberate as that. The Φ and X would be taken "ohne weiteres," as Dr. Kretschmer says; the change of value of Ψ was, as he also says, due to the pressure of $\Xi = \xi$; and we must, it should seem, also admit, without, however, accepting his view of the reason, that greater need was felt of a symbol for KM than of one for ΓM .

We may now apply a similar course of reasoning to the introduction of the Ionic symbols into the West (and here we may make, with Mr. Gardner, Dr. W. Schmid, and Dr. Larfeld, the assumption that the supplementary symbols in the West came from Ionia—or, more precisely, Miletus). Suppose a Western alphabet with $+=\xi$ after Υ . Suppose that the users of that alphabet, or rather some small group or individual among them, deliberately sought to graft upon it the Ionic (Milesian) supplementary signs for the spirants and for the double consonants that they lacked; or, more precisely, that they sought to perfect their alphabet by the addition from an Ionic source of signs for ph , ch , ps (phs), *in*

that order and at the end of their alphabet. In the case of the first sign they could accept — and did, I believe, accept — value and symbol together. In the case of the second sign they could accept the value, but they could not accept the symbol on account of their $+=\xi$. Therefore they cancelled the symbol but accepted the value, attaching that value to the third symbol. They were thus left without a symbol for ψ . In this process we seem to see a deliberate attempt on the part of some one — an earlier Archinus — to enlarge the scope of alphabetic expression by the addition of signs and values together and, so far as possible, in a traditional order, — a fully conscious and systematic procedure. This rests on an assumption — on assumptions, if you will —, but the *reductio* has not been brought, perhaps (as I trust) cannot be brought, *ad absurdum*.

In conclusion I venture to call attention to another case of a change of value of an imported symbol (also Ionic) which can, I think, be detected at Paros, Siphnos, Thasos, and Delos. Here the close *o*-sounds are represented by Ω , the long open one by O ; whereas the reverse is the case in Ionia (Miletus). At Melos we have a differentiation of the symbols for the *o*-sounds in the same direction as at Paros etc., but in a manner independent of Ionia ($C = o, ov$; $O = \omega$). Now the Parian and Milesian systems must hang together, and all plausibility lies in favor of the Ionic system being the original. But why should the Ionic symbols have been reversed in their values at Paros etc.? There seems to be but one reasonable answer to this, viz. that in an earlier stage of the Parian alphabet (perhaps we should rather say the Delian alphabet) a differentiation of the *o*-signs had been made, either the same as at Melos — and hence connected with that method — or at least in the same direction. Upon this differentiation the Ionic differentiation was grafted, and the value of the Ionic symbols was thereby reversed, because the symbol developed from the O that was in use as a differentiative in the islands in question — or at the centre whence their alphabet spread — had

the value of the close *o*-sounds, not of the open. The Ionic (Milesian) differentiative had thus, on its acceptance in the Cyclades, its function changed to that of the local *O*. This explanation may have occurred to others besides myself, but I do not remember to have met with it elsewhere.

I would emphasize, what I believe our epigraphical data warrant, the view that alphabetic shifts and changes of the character of those I have been discussing were made among the Greeks with full consciousness and after much deliberation. The arguments attributed to Archinus at the official introduction of the Ionic alphabet at Athens are but the last stage of a movement that derived, as Dr. Schmid thinks, the spirant signs from the Phoenician $\textcircled{\times}$ and added the symbols for the double consonants to *I*. That the similarity of form of the quiescent samekh to *I* had much to do with the scheme of signs adopted for the double consonants seems, to me at least, very probable.

I venture to add a few bits of supplementary speculation.

(1) If the early spirant pronunciation of $\textcircled{\times}$ and the pronunciation among the Ionians of *I* as *ds* were demonstrable, it would be easy to set up a plausible theory of the way in which, in important particulars, the Greeks enlarged the Phoenician alphabet. $\textcircled{\times}$ plus $\textcircled{\times}$ (+) could be the filling out of a spirant scheme (the forms of the last two characters derived from the first, as Professor von Wilamowitz-Moellendorff suggested); *I* plus Ξ and Ψ would be the filling out of an assibilate scheme. Both spirant scheme and assibilate scheme would start with the dental. The similarity in form between *I* and Ξ as an element in the process I have already alluded to. It may be added that Ξ had already a place in the alphabet; therefore the fact that it precedes $\Psi = \psi$ does not imply that it was used = *ks* before the latter sign came into use. Ψ might be derived from Φ .

(2) We might trace the following stages of the development from the Phoenician alphabet into the Ionian (Milesian):

(a) The introduction (or rather, chiefly, adaptation and adoption) of vowel signs;

(b) The development and adoption of a group of spirant signs;

(c) The development and adoption of a group of assibilate signs;

(d) The development of signs for the open E and O vowels.

The question of the treatment of the various sibilants taken over from the Phoenicians must be dealt with apart.

(3) I have spoken above of a Milesian alphabet and of a Delian alphabet. Both would be connected with the culture that centred about important shrines of the great divinity of culture — Apollo. May not the great Delphic shrine have played its part? Should we say Delphian alphabet for Western alphabet?

MORTIMER LAMSON EARLE.

"HERMES DISKOBOLOS"

WHEN Mr. Georg Habich, a few years ago,¹ attempted to overthrow the accepted identification of a marble statue² in the Vatican as a discus-thrower, and endeavored to prove that the statue was a copy of the Hermes Diskobolos by Naukydes, he advanced two main arguments. One was based on his observation that not one of the many discus-throwers on vase-paintings resembled the marble statue. This observation is no longer correct, there is a figure on an unpublished red-figured *deinos*³ in the Museum of Fine Arts in Boston which does resemble the statue (Fig. 1). The only noteworthy difference between the two figures is that the Boston athlete seems to be walking, while the Vatican athlete is represented as standing; the other differences are slight and readily understood, if one assumes that the vase-painting exhibits the adaptation of a statuary type.

One of Mr. Habich's arguments is thus invalidated, and it becomes a duty to investigate more carefully also the worth of his second argument. He has based it on his interpretation of a passage in Philostratus⁴ and his personal view of how a discus-thrower ought to take his stand, viz. with his left leg in advance. The Vatican statue has the right leg advanced.

¹ *Jahrbuch d. kais. Deutsch. Arch. Inst.* July, 1898.

² Mus. Vatic. no. 1615; Friederichs-Wolters, no. 465; Baumeister's *Denkmäler*, I, fig. 503, or Springer-Michaelis, *Handbuch der Kunstgeschichte*, fig. 406.

³ Mentioned by Mr. E. Robinson in the *Twenty-first Annual Report* (for 1896) to the Trustees of the Boston Museum of Fine Arts, p. 33, no. 2; also *Arch. A z.* 1897.

⁴ *Imag.* I, 24.

Mr. Habich will undoubtedly be the first to acknowledge the insufficiency of an argument based solely upon subjective considerations; and the investigation, therefore, resolves itself to the interpretation of the passage in Philostratus, which reads:

- βαλβίς διακέχωσται μικρὰ καὶ ἀποχρῶσα
 ἐνὶ ἐστῶτι, ἥ δὲ τὸ κάτωπιν καὶ τὸ
 δεξιὸν σκέλος ἀνέχουσα πρηνῇ τὰ
 ἔμπροσθεν ἐργάζεται καὶ κουφίζουσα
 5 θάτερον τοῖν σκελοῖν, ὃ χρὴ συνανα-
 πάλλεσθαι καὶ συμπορεύεσθαι τῇ δεξιᾷ.
 τὸ δὲ σχῆμα τοῦ δίσκου ἀνέχοντος
 ἐξαλλάξαντα τὴν κεφαλὴν ἐπὶ δεξιὰ
 χρὴ κυρτοῦσθαι τοσοῦτον, ὅσον ὑποβλέψαι
 10 τὰ πλευρὰ καὶ ῥιπτεῖν, οἷον ἀνιμῶντα
 καὶ προσεμβάλλοντα τοῖς δεξιοῖς πᾶσι.

The only reference to the relative position of the legs is contained in τὸ κάτωπιν, and the question arises whether Philostratus was speaking of both legs when he said τὸ κάτωπιν καὶ τὸ δεξιὸν σκέλος (the leg in the rear and the right leg), or whether he was only speaking of 'the right leg in the rear.' Grammatically it is possible to interpret the passage either way, especially if one remembers the aversion which many writers had to using the word ἀριστερός, 'left,' which was believed to be a word of ill omen. The context of the passage, however, shows that τὸ κάτωπιν does not refer to the right leg, because the peculiar shape of the little stand (πρηνῇ τὰ ἔμπροσθεν) relieved 'the other' (θάτερον) leg of much of the weight of the body. 'The other'¹ is the left leg, because it is contrasted with the δεξιὸν σκέλος just mentioned. If the left leg, therefore, bears less of the weight of the body, it must be in the rear, for the very slope of the base implies the lean-

¹ Even without reference to a preceding δεξιός, θάτερος is commonly used of the 'left.' Very rarely it is used of the 'right,' and then only if the 'left' has previously been mentioned; e.g. *Il.* XVI, 734, σκαίῃ ἔγχος ἔχων, ἐτέρῃφι δὲ λάξτερον πέτρον.



FIGURE 1.—DISCUS-THROWER ON AN ATTIC RED-FIGURED VASE IN THE
BOSTON MUSEUM OF FINE ARTS

ing forward of the body, and consequently its weight being supported by the advanced leg.

The whole passage, freely translated, reads as follows :

"A small stand of earth is thrown up big enough to support one man who stands on it with both feet, of which the left is in the rear. This base is made sloping to the front, and by this device enables the left leg to get free of much of the weight of the body; for this left leg must accompany the violent forward movement of the right side.

"The discus-thrower himself ought to stand as follows: with his head turned to the right he ought to stoop enough to be able to glance along his ribs. When he is making the throw he must, as it were, straighten up with a jump and throw in the additional weight of his entire right side."

The first part of the passage contains the description of the βαλβίς and the first position of the athlete on it; the second part describes his second position, when he is ready to hurl the discus, and has stooped and twisted himself like the discus-thrower after Myron. The athlete has *not* changed the position of his legs (Myron's statue has the right leg in advance), because a change of legs is useless unless it is accompanied by a forward movement of the body to add weight to the throw; and on a small βαλβίς, just "big enough to support one man," this is obviously impossible, for the left foot cannot advance beyond the spot held by the right foot, and in a change of legs, therefore, would compel the right foot actually to make a move backward, thereby retarding the throw, rather than accelerating it.

Modern athletes, and Mr. Habich with them, do not agree with Philostratus; they do not use a base from which to hurl the discus, nor do they make a "stationary" throw, but one "on the jump"; they even say that it would be impossible for them to throw the discus far, if they were to follow the instructions of Philostratus. This, however, does not invalidate the testimony of Philostratus for the interpretation of ancient representations of discus-throwers. Philostratus found in the description of a painting the immediate cause for his discussion of the discus-throw, and his descriptions of the positions of the athlete were probably based upon his personal knowledge of famous statues. His second position, therefore, agrees with the discus-thrower after Myron, while his indicated first position is a fairly accurate description of the Vatican figure. It is, therefore, clear that Philostratus at least saw in this figure, or the type which it preserves, an actual athlete. To use him as authority against such an interpretation of the statue is obviously inadmissible.

Both arguments of Mr. Habich are, therefore, invalid; and his assertion as to how a discus-thrower ought to take his stand cannot prove his case. If Mr. Habich, on the other hand, is right, and if really the discus cannot, or could not, be thrown

by a man who has taken his stand with his right leg in advance, then he has simply added one more instance to the many already known that prove that the ancients took liberties in representing subjects from life. They sought to represent the "idea," and were little concerned with the detailed fidelity of their representations.

EDMUND VON MACH.

ARCHAEOLOGICAL DISCUSSIONS¹

SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PERIODICALS

GENERAL AND MISCELLANEOUS

Early Bronze Implements. — In *Archaeologia*, LVIII, 1902, pp. 1-16 (16 figs.), W. GREENWELL describes a number of bronze daggers, knives, and axe-heads in his collection, which deserve record by reason of peculiarities of form, manufacture, and ornamentation. The specimens are from widely separated localities, including England, France, Ionia, Naxos, Greece, Egypt, Armenia, and Syria, nor do they belong to the same period.

Deposits of Sacred Axes. — In *B. Soc. Ant. Fr.* 1903, pp. 137-141, BLAUCHET calls attention to the discovery in France and Sweden of deposits of stone or bronze axes or *celts*. These are usually arranged in a circle or semicircle with the edges inward or upward, and are frequently covered by a slab of stone. The circular arrangement of cromlechs and dolmens may be compared. The axe is considered by many as the symbol of the solar deity or of the god of thunder, and is frequently found engraved on monuments of Brittany. With this cult are to be connected these deposits. A similar signification of the axe is probably found in the Mycenaean cult.

Early Writing in the Mediterranean Basin. — In *R. Arch.* I, 1903, pp. 213-232, R. WEILL discusses the question of early systems of linear writing in Mediterranean lands. He gives a brief history of the discoveries and theories of Evans and Petrie, and states the chronological difficulties caused by the identification of the linear signs found at Abydos with those of Crete. He then considers this identification, and concludes that the similarity is only accidental. The basis of the comparison is wrong. The Egyptian linear signs are derived directly from native hieroglyphics. The Cretan signs are derived also from the earlier hieroglyphics of the island.

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor FOWLER, Editor-in-charge, assisted by Miss MARY H. BUCKINGHAM, Professor HARRY E. BURTON, Professor JAMES C. EGBERT, JR., Professor ELMER T. MERRILL, Dr. GEORGE N. OLCOTT, Professor JAMES M. PATON, and the Editors, especially Professor MARQUAND. In Professor FOWLER's absence, these departments are conducted by Professor PATON.

No attempt is made to include in the present number of the JOURNAL material published after June 30, 1903.

For an explanation of the abbreviations, see pp. 145, 146.

Comparisons must begin with the study of the hieroglyphic systems of Egypt, Crete, and Asia Minor (Hittite). Borrowing can only be assumed when it is known that the common signs have common phonetic values, and this can only be determined when both scripts can be read. The article contains tables of signs from Mycenaean seals, and from Cretan tablets, and of Egyptian linear signs and the corresponding hieroglyphics.

Prehistoric Monuments of Malta. — In *B. Paletn. It.* 1902, pp. 204-233 (2 pls.; 9 figs.), G. A. COLINI reviews a recent paper by A. Mayr on the prehistoric monuments of Malta. He discusses the sanctuaries, — especially the Torre dei Giganti on the island of Gozzo and Hagiar-Kim in Malta, — the fortifications, and artificial caves. He agrees in general with Mayr as to the origin and period of these remains, and calls attention to similar remains in other parts of the Mediterranean.

The Cults of Olbia. — In *J.H.S.* XXIII, 1903, pp. 24-53 (4 cuts), G. M. HINSH concludes his study of the cults of Olbia and other north-Euxine settlements, chiefly from coins and inscriptions. He sees Ionic influence in the worship of Aphrodite under various titles — the rare Euploia associated with Poseidon, Urania, and Apaturus; the last perhaps as a clan-goddess. The Tauric Artemis, like her Brauronian namesake in Attica, may be a survival from Mycenaean times. Trade with Athens is perhaps the origin of the Athena on Olbian coins. The Gorgon is very common, with the usual development from the hideous to the beautiful and melancholy types. Zeus appears as Olbius, Soter, Eleutherius, Basileus, and also Poliarches or Polieus, though Apollo, whose worship is treated in Part I (*J.H.S.* XXII, 1902, pp. 245-267; see *Am. J. Arch.* VII, 1903, p. 230), was the recognized patron-god of Olbia. The river-god Borysthene is the only local element in an otherwise purely Hellenic worship and civilization.

Ancient Models of Buildings. — *Jh. Oesterr. Arch.* I, VI, 1903, Beiblatt, coll. 88-90, contains additional notes to Benndorf's article on ancient models of buildings (*Ibid.* V, 1902, pp. 175-195; *Am. J. Arch.* VII, 1903, p. 230). BLÜMNER cites some examples from Diodorus and Strabo of ἀφίδρωσις, and ἀφίδρωμα used of models of buildings. The object on the Cyzicene relief is interpreted by MARX as a large cake in the form of a circular temple, and by BRÜCKNER as a bird-cage. There are other minor suggestions.

Ancient Silver in Belgrade. — In *R. Arch.* I, 1903, pp. 17-32 (21 figs.), M. M. VASSITS publishes the collection of silver vessels in the National Museum at Belgrade. Twenty-five pieces are described and illustrated, some of which from the inscriptions are connected with the cults of Epona and Matrona. Two of the pieces are attributed to the first century of our era; the others are much later, belonging to the middle of the third century, except one which is shown by an inscription to belong to the early fourth century when Licinius was emperor.

The History of Inlaid Jewellery. — Some points in the history of inlaid jewellery are discussed in *Archaeologia*, LVIII, 1902, pp. 237-274 (pl.; 20 figs.), by O. M. DALTON. It is generally agreed that this style of ornament was introduced to the Teutonic tribes by the Goths, who became acquainted with it in southern Russia during the third and fourth centuries of our era. Two types are distinguished. In one (*cloisonné-inlay*) the slices of stone or paste are inserted in contiguous cells; this variety is most

frequent in Teutonic graves. In the other (*plate-inlay*) the gold surface is pierced with holes, forming a simple design, in which the stones are set, supported by a second plate of gold at the back. The paper discusses the source whence this art came to southern Russia. It is maintained that the art originated in Egypt and passed through Assyria, where we know it only through gilt inlaid ivories from Nimrūd, to Persia, where it is represented by a gold armlet found on the Oxus, now in the British Museum. From Persia it passed through Bactria to the tribes north of the Oxus, whence it travelled to the Don across the Obi and Ural Mountains. This course, however, can only be shown for the *cloisonné-inlay*. Plate-inlaying seems to have become popular in Iran later, and, though found in Afghanistan, is very rare in Siberia, and never seems to have made much headway north of Persia. The link with the barbaric examples of western Europe is furnished by the treasure of Petrossa, which certainly was brought into Roumania from southern Russia. Both varieties therefore met in southern Russia in the early centuries of our era, and the Goths were merely adapters and carriers of a style which originated in another continent. The Roman and Byzantine examples of this style may well have been derived directly from southern Russia or from Persia.

The Seal of Solomon.—The Museum at Constantinople contains an engraved gem bearing the inscription in characters of the late Empire, *Σολωμὼν εἶπε φύ(λ)αξε*; the latter word is probably for *φύλαξα*. This is only one of many witnesses to the important part played by Solomon in Greek magic in Roman and Byzantine times. The subject is treated at some length by P. PERDRIZET in *R. Et. Gr.* XVI, 1903, pp. 42-61 (9 cuts). In addition to the gem he cites other phylacteries bearing this name as part of the charm, and also describes six types of phylacteries in metal or red hematite, on which Solomon on horseback transfixes with his lance a prostrate she-devil, while the reverse shows often the evil eye (*φθόνος*) attacked by various animals. This transformation of Solomon into the type of a St. George is probably due to pagan influence, especially that of the Thracian horseman as protecting hero. In some cases Solomon is helped by an angel Araaf, Arlaf or Archaf, who is perhaps derived from Asaph, who plays a part in Arab legend. The article contains additional examples of the evil eye attacked by beasts already discussed by Otto John. The phrase *σφραγὶς Σολωμῶνος* is discussed, and it is claimed that there is no trace of gnosticism in it. The great mass of the amulets owe their origin to Egypt, where the belief in Solomon as a magician, derived from Jews, has developed, as is shown by the prophylactic animals on these talismans.

Orientalism in Europe in the Middle Ages.—In view of the increasing interest in the subject of Oriental influence upon European art, the study of L. BRÉHIER in *Byz. Z.* 1903, pp. 1-39, on the Colonies of Orientals in western Europe at the beginning of the Middle Ages, is of unusual importance. He traces from documentary sources the settlement of Orientals in Italy, Gaul, Germany, and Great Britain, and considers also the importation of Oriental objects of art and religious institutions. The period to which he confines his attention extends from the fifth to the eighth centuries.

Saracenic Enamelled Glass.—In *Archæologia*, LVIII, 1902, pp. 217-226 (pl.: 7 figs.), C. H. READ publishes a Saracenic goblet of enamelled glass, now in the British Museum, and said to have been found near Aleppo.

It has been maintained that these glasses as well as the so-called Arab mosque lamps were of Venetian make. The writer argues that there is good evidence for a flourishing glass industry in Syria as early as the thirteenth century; that these glasses were the product of this native art, which was probably derived from Persia, if not actually carried on by Persians. A comparison with undoubtedly Venetian glasses shows that similar work was produced in Europe at about the same time. Certain technical differences, however, serve to distinguish the Syrian from the Venetian product.

Turkish Maps of the Aegean.—In *Athen. Mith.* XXVII, 1902, pp. 417-430 (pl.; cut), R. HERZOG publishes an account of a Turkish description of the Aegean Sea in 1520. The work is by the Turkish corsair, Piri Reis, who was so convinced of the importance of maps for the conquest of foreign countries, and of the inadequacy of the existing Turkish works, that he prepared a series of charts covering the Mediterranean, and especially the Aegean Sea, with descriptive text. The work contains 130 sections, each with a map, and was much copied and used in Turkey. The maps were made originally from tracings of Venetian charts, since lost, which are far superior to those in the manuscripts of Buondelmonte. The text is chiefly practical, giving anchorages, reefs, springs, forts, but including notices of ruins, which also appear on the maps. Manuscripts are in Berlin, Vienna, Dresden, Bologna, and the Vatican, as well as several in Constantinople. So far as compared the differences in the text do not indicate any revisions of the original. Herzog gives a translation of the description of Attica and reproductions of the maps in the Berlin and Dresden codices, and expresses the hope that the entire work may be published. He has found it of value for the islands, and Wiegand for the coast about Priene and Miletus.

Bronzes in Constantinople.—*R. Arch.* I. 1903, pp. 422-425, contains notes by P. PERDRIZET on sundry details in Joubin's *Catalogue sommaire des bronzes et bijoux du Musée Impérial Ottoman*, Constantinople, 1898. They are the result of a recent visit to the museum.

Monuments of Cambodia.—The fourth volume of the publications of the École française d'extrême-orient is *Inventaire Descriptif des Monuments du Cambodge* by E. LUMET DE LAJONQUIÈRE (Paris, 1902, E. Leroux, cv, 430 pp.; 196 figs.; large 8vo). The Introduction contains a general discussion of the monuments with reference to their character, as temples, dwellings, bridges, reservoirs, etc., their construction, ornamentation, sculptures, and inscriptions. The rest of the book is a minute inventory of the monuments and inscriptions according to their geographical situation. The author states that the inventory of monuments, properly so called, contains 290 numbers, while there are 111 inscriptions or groups of inscriptions, of which thirty-six are new. The monuments begin about the sixth century of our era, reach their highest artistic merit in the eighth, and are decadent in the eleventh.

Coloring Museum Casts.—The Art Director of the Bremen Museum has astonished his fellow-citizens by coloring and painting the collection of casts in imitation of the marble or bronze of the originals. The result has been greatly to enhance the interest of the collection and to relieve the monotony of long lines of white plaster figures. (*American Architect*, No. 1407, p. 88.)

Early Remains in Arizona.—A series of articles on 'Antiquities of the United States' is to be published in *Records of the Past*. The first, by HENRY MASON BAUM, appears in II, 1903, pp. 164-173 (18 cuts). It treats of the ruins in the De Chelly, del Muerto, and Monument canyons in north-eastern Arizona. These consist of (1) Cliff ruins, varying in size from a single room on some ledge to great buildings in deep caves containing from twenty-five to seventy-five rooms, and (2) Pueblo ruins on the canyon bottoms near the walls. The two classes of dwellings are of the same material, and the stone implements, pottery, fabrics, and human remains are the same, so that there seems no evidence for any change of race. When this prehistoric population lived and how it disappeared are unknown. There is no evidence that it was in any way connected with the Navajo Indians, who now inhabit this region.

EGYPT

Egyptian Inscriptions from the Sinaitic Peninsula.—Among the inscriptions at the turquoise mines in Wady Magharah, in the Sinaitic peninsula, occurs twice the cartouche containing the Horus name of Mersekha, one of the kings whose name is frequently found in the early tombs at Abydos. This shows that the unity of Egypt was a fact at the time of the Thinite kings, for unless they were masters of the north of Egypt, they could not have extended their power east of the isthmus. This is confirmed by the discovery of tombs of this period at Sakkarah containing objects with the names of the kings of Abydos. (R. WEILL, in *C. R. Acad. Insc.* 1903, pp. 160-162.)

Ancient Portraits.—T. GRAF has reported to the Anthropological Society of Vienna that in his collection of ancient portraits, among those from Kerke in central Egypt, he has identified the following: No. 4, Ptolemy Philadelphus; No. 5, Ptolemy Soter; No. 12, Queen Cleopatra; No. 15, Queen Berenice; No. 22, Ptolemy Philometor; No. 26, Ptolemy Euergetes; No. 28, Perseus of Macedon; No. 43, Queen Cleopatra Tryphaena; No. 81, Queen Arsinoe. No. 28 must have been executed in Greece, and the others must be by distinguished artists, as only such would have been permitted to paint the royal family from life. (*Sitzb. Anth. Ges.* XXXII, 1902, p. 65.)

Recent Publications of Papyri.—In the *Revue des Études Anciennes*, V, 1903, pp. 139-190, P. JOURNET begins the publication of a 'Chronique des Papyrus,' containing an account of works which have appeared in the first half of 1902, with special reference to texts published for the first time. The articles are classified as follows: (1) Excavations and Discoveries in 1902; (2) Collections; (3) Literary Papyri; (4) Documents for the History of Greek and Roman Egypt; (5) Geography and Topography; (6) Institutions; (7) Palaeography and Bibliography; (8) Grammar; (9) Proper Names; (10) Prosopographia; (11) Metrology; (12) Calendar.

BABYLONIA

The German Excavations at Babylon.—A series of articles describing these excavations is in course of publication in *Records of the Past*, II, 1903, pp. 3-15, 144-151, 185-189 (pl.: 6 cuts). The articles can contain a full

account of the preliminaries and a condensed account of the campaign until January, 1900. They are abridged from the official reports of the Deutsche Orient Gesellschaft.

The American Excavations at Nippur.—These excavations are described in three articles in *Records of the Past*, II, 1903. In the first (pp. 35-46; 2 pls.; 9 cuts) the Rev. JOHN P. PETERS gives briefly the history of the explorations and the results attained in 1889 and 1890. In the second (pp. 47-62; pl.; 12 cuts), A. T. CLAY states the results of the later excavations, as described by Hilprecht in his *Explorations in Bible Lands* (Philadelphia, 1903). The third article (pp. 99-118; pl.; 15 cuts) is a discussion of the architecture by C. S. FISHER, architect of the last expedition. He describes the Parthian Fortress, the little Parthian Palace, the Temple of Bel, with special reference to the Ziggurat, the Temple Library, and the City Wall and Gate. In the latter a part of the wall was found to be due to Naram-Sin (3750 B.C.), whose work had been partly used and partly removed by Ur-Gur (3000 B.C.) in his reconstruction.

The Code of Hammurabi.—*Records of the Past*, II, 1903, pp. 67-90 (7 pls.), contains a translation of these laws prepared from the German of H. Winckler by H. O. SOMMER and W. E. AMBROSE. The plates include a facsimile of the cuneiform text.

The Seal of Gudea.—*C. R. Acad. Insc.* 1903, p. 37, contains a summary of a paper by HEUZEY on the seal of Gudea, which is known from some clay impressions. It shows the king worshipping a seated divinity, holding two magic vases, which pour streams of water. This is probably Êa, as god of moisture. The cartouche of the king is supported by a winged quadruped with a serpent's head, wearing the horned tiara of the Chaldean divinities, and very like the fantastic dragons represented on Gudea's stone libation goblet.

SYRIA AND PALESTINE

The Hills of Jerusalem.—In *Z. D. Pal.* V. XXV, 1902, pp. 178-194, G. GATT defends his view as to the interpretation of the description by Josephus (*B. J.* V. 4, 1) of the hills of Jerusalem. The "hill of the upper city" is the entire western hill, including Calvary, from Psephinus to Siloah; the "lower hill" is the eastern hill from St. Stephen's to Siloah, including Bezetha, Moriah, and Ophel. The Tyropoeon valley is the modern Wād, from the Damascus Gate to Siloah. The "hill of the upper market" and Akra are not the same as these two hills. The former is the southern part of the western hill; the latter is the continuation of Mt. Calvary. Josephus distinguishes two collective hills and four special hills, and his description consists of a general and a special part. His obscurity is due to his combining these two descriptions, and passing repeatedly from one to the other without clear indication of the change.

The Site of Emmaus.—There was published in Jerusalem in 1902, *Deux Questions d'Archéologie Palestinienne*: I. 'L'Église d'Amwās l'Emmaus-Nicopolis'; II. 'L'Église de Qoubeibeh l'Emmaus de S. Luc. Par le P. Barnabé O. F. M. Missionnaire Apostolique.' The work is of great importance for the Emmaus question. Barnabé publishes the first exact plan of the ruins of Amwās, and reaches the conclusion that the original building was not a Basilica with three aisles, but a Roman bath. He holds also that the original church at Qoubeibeh was not built by the Crusaders, but in the sixth

century, and in part with material taken from a Roman temple. (I. BENZINGER, *Z. D. Pal.* V. XXV, 1902, pp. 195-203, 4 cuts.)

An Inscription from Mt. Hermon.—In the Hall of Inscriptions in the British Museum may be seen a stone pillar recently presented by the Palestine Exploration Fund. The pillar was found in 1870, by Sir Charles Warren, beside the ruins of a temple on the summit of Mt. Hermon, and has since then been in the possession of the Fund. It bears a late Greek inscription (fourth to fifth century A.D.), warning "hence, by order of the god, those who do not take the oath": *κατὰ κέλευσιν θεοῦ μεγίστου [καὶ ἁγίου] οὐ δυνύοντες ἐνταῦθεν*. The words in brackets are the reading of M. CLERMONT GANNEAU in the last (April) number of the *Quarterly Statement* of the Palestine Fund. The god would be Baal-Hermon, mentioned in Judges iii. 3 and 1 Chron. v. 23. M. Ganneau rejects the negative before *δυνύοντες*; but apart from the evidence of the stone itself, the formula as to non-jurors, if we may use that term, is familiar in the inscription of Audania, imposing fines on those who do not take the oath, and excluding them from the sacrifices and mysteries (Dittenberger, *Sylloge Inscr. Gr.*² 653). On the analogy of that inscription, those who did not take the oath on Mt. Hermon were warned off from the shrine of the god. (*Athen.* May 9, 1903.)

Notes on Syrian Mythology.—In *R. Arch.* I, 1903, pp. 124-148, 347-382 (18 cuts), R. DUSSAUD publishes 'Notes de Mythologie Syrienne.' These articles are a detailed discussion of the symbols and images of the solar deity. § 1 discusses the winged disk and the disk and crescent. Under the Egyptian occupation the local gods became solar, and the god received the winged disk flanked by the *uraeus* serpents, while the goddess was given the disk between the horns of Isis-Hathor, but modified into the disk and crescent. This also became the symbol of Astarte, i.e. the planet Venus, as combining the symbol of sun and moon, for Venus as morning and evening star precedes both sun and moon. § 2 treats of Azizos and Monimos as *πάρεδροι* of the solar god. These are identified with Phosphorus and Hesperus, and developed from the Sabaeen god 'Athtar, the masculine form of Achtoret-Astarte. In § 3 the eagle as a symbol of the solar deity is attributed to the identification of the local god with Zeus, and the consequent adoption of the Greek type in art and the Greek emblem. § 4 discusses Helios Psychopompos. This conception is due to the later syncretism, which is best shown in Julian's oration on the Sun, where the deity appears as accompanying the soul in its return to heaven. § 5 is devoted to Jupiter Heliopolitanus, the great solar god of Baalbek. The extant monuments are described, classified, and interpreted. The type of this god is not of Egyptian origin, as Macrobius says, but is derived from Hadad-Rammān, who seems to have been brought into Syria by the Aramaeans and identified with many local divinities. § 6 briefly mentions the quadriga and the solar chariot. § 7 treats of the solar deity as a horseman. § 8 discusses the solar deities of Palmyra. These are two in number, Malakbel=Chamach=Sol, and Bel, or Ζεὺς Βῆλος. The former is associated with a lunar god, Aglibol, and with the goddess Allāt, identified now with Astarte, and again with Athena. An altar in Rome, dedicated to Malakbel as *Sol sanctissimus*, is described and interpreted as throwing much light on the myth of this god. The two deities of Palmyra were of the same nature, and their attributes in consequence are easily confused.

Portraits of Antiochus Epiphanes.—In *R. Arch.* I, 1903, pp. 343-346 (pl.), J. SIEVEKING seeks to identify the person represented on two gold rings in the Louvre, first published by Furtwängler (*Griechische Gemmen*, pl. xxxi, 25, 26). The latter thought they represented a Ptolemy, unknown to numismatics, since in one the king wore the double crown of Egypt. The features, however, are not those of the Ptolemaic house, but rather recall a Seleucid. The closest analogy is on coins of Camnisciros, probably the king of a principality subject to Syria. The portrait is therefore probably that of Antiochus IV, Epiphanes, who in 171-170 B.C. conquered Egypt, and was crowned at Memphis. His own coins cannot be cited against this view, for they do not agree among themselves and belong to a period of marked decline in the Seleucid coinage.

The Second Legion at Sidon.—In *Rhein. Mus.* LVIII, 1903, pp. 476-480, E. RITTERLING discusses the inscription from Sidon, *C.I.L.* III, 151, comparing *C.I.L.* III, 6603, 6598; V, 8272. The soldiers in the legion were enrolled in the century according to the consular year in which they entered the service. According to the Sidon inscription, Julius Fabianus entered the army in 96 A.D., and died while serving in *legio II Traiana fortis* in 118 A.D. Therefore at that time the legion or a detachment was serving outside of its usual station, Egypt, probably because of the Jewish revolt. The early history of the legion is reconstructed. It seems to have been raised about 100 A.D. for service in the Dacian wars, where it gained the surname *fortis*, and before 109 A.D. it was transferred from lower Moesia to Egypt.

The Era of Eleutheropolis.—It has long been thought that under Septimius Severus, the city Baitogabra received the name Eleutheropolis, and began to reckon an era. The date has usually been placed between 202 and 208 A.D. Coins of Elagabalus and Macrinus show that the name *Lucia Septimia Seveera Eleutheropolis* must have been granted in the year 199-200 A.D. An inscription from Jerusalem dated in Indiction 5, year 448 of this era, would fall in 647 A.D. It seems, however, impossible that in the time of Severus any city could have assumed the name Eleutheropolis, and the inscription from Jerusalem looks more like a document of the fifth century. It seems likely that the era of Eleutheropolis is not yet determined, but it must fall in a year before or after 4 A.D., which is a multiple of fifteen. A new inscription from Beersaba, which cannot be earlier than the middle of the fourth century, is dated in 344 of the era, Indiction 6. Probably therefore the era was reckoned from a date later than 4 A.D. (W. KUBITSCHKE, *Jh. Oesterr. Arch.* I, VI, 1903, pp. 50-54; 3 figs.; and Beiblatt, coll. 91-92.)

Sites in Northern Syria.—In the *Century Magazine*, LXVI, 1903, pp. 217-227 (11 cuts), HOWARD CROSBY BUTLER describes and illustrates some of the sites visited by the American expedition to northern central Syria. The account is popular, and does not profess to add anything to the scientific notes already published. (See *Am. J. Arch.* IV, 1900, pp. 415-440.)

ASIA MINOR

Hittite Remains at Hilar.—In *Records of the Past* II, 1903, pp. 131-140 (19 figs.), ELLSWORTH HUNTINGTON describes the Hittite ruins at Hilar, as seen by him in 1901. The situation of Hilar, between Harput and Diabekir, on the great road from Mesopotamia to eastern Asia Minor, and the presence of Khaldi and Hittite characteristics in the sculpture are both of

importance. The remains consist of rock-cut tombs, steps, and platforms, which suggest Khaldi influence, and panels with carvings which show a Hittite origin. The place must have been strongly fortified, for it was situated at a strategic point near the junction of the empires of the Assyrians, Hittites, and Khaldis.

Sendchirli.—The work of 1902 in the German excavations at Sendchirli in northern Syria was reported to the Anthropological Society on October 15, 1902. Besides the three buildings already known, two large paved courts were found and two buildings with entrance-halls, megarons, bathrooms, etc. Whether they are palaces or temples cannot yet be determined, but they have the same peculiar wide and shallow rooms as the earlier found buildings. They are probably those referred to in an inscription as restored by Barrekub in the eighth century B.C. The whole complex of buildings seems to have remained undisturbed by later building operations since that time until a great conflagration destroyed it but hardened and helped to preserve the brick walls. The eastern parts of the hill are not yet explored, nor the lower strata of the portion already excavated. (F. von LUSCHAN, *Arch. Anz.* 1903, pp. 46-52.)

Seleucid Portraits from Alexandria Troas.—In *J.H.S.* XXIII, 1903, pp. 92-116 (2 pls.), G. MACDONALD publishes as an example of the method needed in working out certain numismatic problems, an intensive study of a limited class of unidentified portrait coins marked ANTIOXOY BAΣIΛEΩΣ. He assigns them to Antiochus II and to his son Antiochus Hierax and to the mint of Alexandria Troas.

The Topography of the Troad.—*Athen. Mith.* XXVII, 1903, pp. 239-252 (map; cut), contains a discussion on certain sites near Troy by F. CALVERT and H. THIERSCH. The former places the harbor of Ilium, not on the strand between Cape Sigeum and Cape Rhoeteum nor at Intepe-asmak, but farther east at Tavolia, where Schliemann and others place Rhoeteum. This he places at Palaeokastro, Schliemann's Ophrynum. The latter is transferred to the northeast, to It-gelmez, where are ancient remains. These views are criticised by Thiersch, who defends the old view as to the harbor, which he places at Intepe-asmak, and Rhoeteum. The situation of Ophrynum is not definitely settled. The older town and the grave and grove of Hector must have been near Troy, and the *λίμνη πελειῶς* can only be the swamp near Halil-eli. The later Greek settlement may well have occupied another site, and yet kept possession of the ancient shrine.

The Worship of Dionysus Cathegemon in Pergamon.—In the worship of the rulers of the Graeco-Roman antiquity there appears a strong personal element through which the ruler identifies himself with different gods. Besides this, however, is a public worship based upon a dogma as to the descent of the royal house from a definite divinity, who is called *ὁ ἀρχηγὸς τοῦ γένους*. The Ptolemies traced their lineage through Heracles and Dionysus to Zeus; the Seleucidae claimed descent from Apollo. In *Athen. Mith.* XXVII, 1903, pp. 161-188, H. v. PROTT shows that at Pergamon the chosen divinity was Dionysus Cathegemon. Two oracles designated Attalus I as "son of the bull," i.e. the horned Dionysus, and the Pergamene inscriptions, especially I. 248, show the close connection of the royal family with the cult of Dionysus Cathegemon. This conclusion is confirmed by an examination of the decrees of the Dionysiac artists of Teos in honor of

Craton. The Attalistsae here mentioned, and the buildings bequeathed them, belong in Pergamum, and refer to the royal cult to which they were devoted. The theatre terrace is the seat of this cult in Pergamum. It may have been planned by Attalus I, but it was carried out by Eumenes. The temple of Dionysus Cathegemon is certainly the "Ionic temple" on the terrace, and the Attaleum must be identified with the "Nischenbau." The temple was later burned, but was restored in Roman times, probably under Trajan, and afterwards dedicated to Caracalla. The cult of Dionysus and the royal family must have died out soon after the fall of the monarchy, but it revived under the empire, and the title *νέος Διόνυσος* is borne by Trajan, Hadrian, and Antoninus in the inscriptions of ἡ ἱερὰ σύνοδος τῶν ἀπὸ τῆς οἰκουμένης περὶ τὸν Διόνυσον καὶ Αὐτοκράτορα . . . Καίσαρα Σεβαστὸν νέον Διόνυσον τεχνιτῶν, which seems to have been founded under Trajan. That the cult was mystic is shown by the presence of *βάκχοι* under the kings and *βοσκῶλοι* under the emperors. This choice of Dionysus by the Attalidae is obviously due to their rivalry with the Ptolemies the *νέοι Διόνυσοι* and *Ῥαίρεις*. In a note (pp. 265-266), attention is called to the fact that the cult of *deus Augustus* and *dea Roma*, with the background of Troy and the Venus Genetrix, is the Roman reaction against the idea of Alexander. This idea, however, survived in the East, and was revived under the more Hellenistic and cosmopolitan rule of Trajan and Hadrian. It is noteworthy that at this time there was a revival of interest in the history of Alexander.

The Nike of Niceratus.—At the November (1902) meeting of the Berlin Archaeological Society, A. Coxe, reporting on the work at Pergamum, showed an armored torso found there with an inscribed base and a column-pedestal. Though genuinely antique, he thinks they were set up together in the place where they were found, in late Byzantine times, and that they may be the original of a fanciful drawing ascribed to Cyriac of Ancona which has been made the basis of still more fanciful deduction as to Nike and the terrestrial globe in the Pergamene period. If this is so, the Nike of Niceratus in Roscher's Lexicon is a pure fiction. (*Arch. Anz.* 1902, pp. 162-164; ents.)

The Office of Oenoposiarch.—The office of *οἰνοποσιάρχης* is known from two Bithynian inscriptions (*B.C.H.* XXIV, pp. 386, 407), and is probably found in an inscription from Nicomedia (*Izvestja russ. arch. inst. Konstant.* II, 130), where the impossible *δη]μοσιάρχης* has been restored. Another Bithynian inscription (*l.c.* II, 112) has the word *οἰνοπόσιον* in the vulgar form *οἰνοπόσιον*. (J. ZINGERLE, *Jh. Oesterr. Arch.* I, VI, 1903, p. 122.)

Notes on the Ancient Geography of Asia Minor.—In *Revue des Études Anciennes*, V, 1903, pp. 1-14, G. RADET discusses certain points in the ancient geography of Asia Minor. (1) According to Diodorus (XVII, 28, 1-5), during his march through Lycia in 334-333 B.C., Alexander captured the strong fortress of the Marmorians. They are not mentioned elsewhere, but this seems the same event as the capture of a Pisidian fort, which had greatly annoyed the inhabitants of Phaselis, recorded by Arrian (I, 24, 5-6). This was seen by Spratt and Schönborn, but has been overlooked by later writers. The site of this citadel can only be the ruins above Saradjik. Those at Ghéderler and Tchandyr, which have been suggested, do not correspond with the indications in the texts. (2) Notes from Haussoullier and Cumont on the inscriptions from the plain of the Cayster (*Revue des Études*

Anciennes, IV, 1902, pp. 258-266; cf. *Am. J. Arch.* VII, 1903, p. 107) lead to a discussion of the sites of Dioshieron and Bonita. The former is usually placed at Birghé, though Cumont, in view of inscription 15, suggests Adigumé. Possibly the town was moved to Birghé (Pyrgion) during the late empire. Inscription 2, as amended by Haussoullier (μοῦ Βοναῖτων for Μοῦ Βοναῖτων), shows the location of Bonita mentioned in the lives of St. Theodore Studites and St. Nicholas Studites. It corresponds to Kutchuk-Katefkhes or Belevi, near the crossing of the road from Smyrna to Tralles and that from Ephesus to Sardis.

An Error of Ptolemy.—Ptolemy (V, 4) includes in the Province of Galatia the coast of the Black Sea, including Abonotichus, Sinope, and Amisus. These cities belonged to Bithynia Pontus in the time of Trajan, but some have supposed that they were later transferred. The inscriptions, however, show that the cities still formed part of the *κοινὸν Πόντου*, and Lucian (*Alex.* 57) shows that about 167 A.D. Abonotichus was still under the governor of Bithynia. The cities never formed part of Galatia. Ptolemy's error is probably due to a combination of different data. He knew Paphlagonia was included in Galatia, and he gave to this district the extension indicated in his geographical sources. (F. CUMONT, *R. Et. Gr.* XVI, 1903, pp. 25-27.)

GREECE

ARCHITECTURE

The Palace at Cnossus.—In the *Journal of the Royal Institute of British Architects*, X, 1903, pp. 97-106 (plan; cut), A. J. EVANS gives 'A Bird's-eye View of the Minoan Palace of Knossos, Crete.' He points out especially that it is built around a square court, with four main entrances, of which the chief seems to have been at the west. The resemblance to the palace at Phaestos is noticeable. Both have an elaborate plan, but the main lines are rectangular, and there is no provision for fortifications. The central court with its four approaches is similar to the Roman camp and its prototype in the Terramare of the Po Valley. There is, however, no trace of a *templum* at the point of intersection, and the principal halls are not at the centre, but on the sides of the court. The main part of the palace is contemporary with the fifteenth dynasty of Egypt (eighteenth century B.C.), but the earlier palace goes back to the third millennium and the thirteenth dynasty, while an earlier occupation is of the fourth millennium, and the neolithic settlement is earlier yet. *Ibid.* pp. 107-131 (2 pls. in color; 81 figs.) THEODORE FYFE discusses the painted plaster decoration of the palace. He treats only of decorative forms, as distinguished from paintings of the human figure and natural objects. These forms are divided into large-scale and small-scale, the latter forming merely the frame for "picture" frescoes. In some cases these illustrate architectural forms and furnish hints for the restoration of the palace itself. The article discusses the treatment of the material as shown by the remains *in situ*. All plaster seems to have been finished in color, but it is uncertain whether the gypsum slabs were painted, though it is probable that other stone work was colored. As to the ornament in detail, the earliest palace fresco shows forms analogous to late Kamare ware. The following points are considered at length: Moulded work, various spiral forms, the rosette, the "triglyph" motive, which seems

to have been used to ornament places where the structure required strength, and various smaller motives, such as dentils, fish-scales, and lozenges.

In *Jb. Alt. Ges. L. P.* XI, 1903, pp. 385-407 (2 pls.; 12 cuts), K. TITTEL describes the palace, partly on the basis of the article by Evans in the *Annual of the British School at Athens*, VII, pp. 1-120 (*Am. J. Arch.* VI, 1902, pp. 337-359), and partly from personal observation during a visit with Dörpfeld in 1902. His account is interesting, but contains little that is new.

The Date of the Earlier Parthenon.—*Athen. Mitth.* XXVII, 1902, pp. 379-416 (2 pls.; 6 figs.), contains a discussion by W. DÖRPFELD of the date of the older Parthenon. After a brief history of earlier views and correction of some details in his previous article (*Athen. Mitth.* 1892, pp. 158 ff.), the author proceeds to a minute examination of the stratification and supporting walls between the foundations of the Parthenon and the southern wall of the Acropolis. Four periods are thus distinguished, marked by different plans, while the two earlier certainly precede the erection of the Cimonian wall. Furthermore, the steps and marble column drums of the earlier building show plain traces of fire, such as appear on the other pre-Persian buildings. Differences in the building materials show that even in this earlier building there was a change of plan, and probably an interruption of work. In the light of these investigations, the history of the building is thus reconstructed. After Pisistratus had completed the old temple of Athena by adding the peripteros, a new and larger temple was begun under Cleisthenes near the end of the sixth century. It was to be of poros, and the foundations and a large terrace were completed before the battle of Marathon. After the victory it was decided to widen the terrace and complete the temple in marble. Only the lower courses of the walls and the lowest drums of the columns were in place when the Persians captured the Acropolis and burned the sanctuaries. The burning of the scaffolding about the unfinished building accounts for the marks of fire on the stones. After Plataea, the old temple was hastily repaired without its colonnade, but work on the new temple was not resumed under Themistocles or Cimon, when building was chiefly confined to fortifying Acropolis, city, and harbor. At this time the burned drums and blocks of both temples were built into the north wall as a memorial of the crime of the Persians. Not until the middle of the century, under Pericles, was a general rebuilding of the ruined shrines begun, and an extensive plan for the reconstruction of the Acropolis adopted. Dörpfeld maintains that Parthenon, Nike Temple, Propylaea, and Erechtheum all belong to the original plan, and that there is reason to believe that the latter was begun as soon as the Parthenon was completed. A discussion of this point and others connected with the old Hecatompedon is promised in the future.

The Construction of the Ionic Volute.—In the *Journal of the Royal Institute of British Architects*, X, 1903, pp. 21-30 (11 figs.), F. C. PENROSE discusses the 'Origin and Construction of the Ionic Volute.' This decorative curve is of Greek origin, and the method described in the paper enables the exact figure of any true Greek example to be reproduced. The spiral in which every convolution extends from the centre by equal intervals is found in Mycenaean decorations, and may be formed mathematically by unwinding a string from a cylinder. This "involute of the circle" is monotonous

in comparison with the spiral of the nautilus or ammonite. The expanding spiral may be produced by unwinding a string from a helix made on the involute of the circle. This involute of the helix coincides perfectly with Greek volutes, as at Ephesus, Priene, and the Mausoleum. The Athenians substituted in the outer convolution a tangential circle, of which the measure is equal to the distance required to complete the design. The mathematical construction of these curves is shown, and a mechanical device, by means of wooden cones, described for drawing the volutes in a continuous curve, rather than by a succession of points.

The Abaton at Epidaurus. — In *Athen. Mith.* XXVII, 1902, pp. 288-293, I. H. HOLWERDA discusses the Abaton at Epidaurus. This is not the long hall north of the temple, and the arguments used by Cavvadias in support of this identification really make against his view. The Abaton was probably the large quadrangular building near the east front of the temple, which Cavvadias considers the house of the priests. The indications that in this enclosure was the earliest shrine are in favor of the transformation into the sacred Abaton when the temple was built, in the fourth century B.C.

The Temple of Helios at Athens. — In Athens there was a priest and priestess of Helios, and therefore also a temple. It is probable that the calendar-frieze on the Byzantine church of the Panagia Gorgopiko comes from this temple. If so, it is probable that other remains of its decorations have been built into the same church. (E. MAASS, *Jh. Oesterr. Arch.* I. VI, 1903, Beiblatt, coll. 83-84.)

SCULPTURE

Harmodius and Aristogiton. — At the January meeting of the Berlin Archaeological Society, CORSEN discussed the statues of the Tyrannicides at Athens, upholding Thucydides's account of the murder against the criticism of Aristotle, on the evidence of vase-paintings, the Parthenon frieze, etc. The scholium, ἐν μύρτον κλαδί κτλ., had been wrongly interpreted in antiquity, and really meant, "Even at the sacrifice I will go armed (for protection)." Only certain chosen old men carried branches at the Panathenaea. Studniczka's attribution of the female statue on the Acropolis to Antenor he thinks not proved and not probable. The group was later, erected at a time of democratic exultation, probably in 487 B.C. (*Arch. Anz.* 1903, p. 41.)

The Pediment Sculptures of the Temple at Delphi. — In *B.C.H.* XXV, 1901, pp. 457-515 (10 pls.; 6 cuts) T. HOMOLLE publishes the first article on the pediment sculptures of the temple of Apollo at Delphi. These fragments were found in a somewhat narrow space, which was filled up in the fourth century, when the earthquake and fall of rocks from the mountain led to the building of a new terrace in preference to clearing away the debris. The space within which these fragments were found seems to have been the ancient precinct of Neoptolemus. The statues fall into two groups, those in marble and those in poros; and again are partly of animals and partly of human beings. The marble fragments belong to two groups, a lion attacking a deer, and a lion attacking a bull, three horses, two female figures of the type of those on the Acropolis, and a nude male. Symmetry and other details, fully discussed, show that originally the pediment contained the two animal groups, four women, two bigae, and two men, as grooms. The lacunae are at the extreme corners and in the centre. The subject seems to be the strife of two

heroes, behind whom were the empty chariots with the attendants, and farther away two women on each side as spectators, then the groups of animals. In the centre would be the figure of a divinity as arbiter. Probably the scene represents the strife of Heracles and Apollo for the tripod. Another marble fragment of a Niké seems to be one of the acroteria. The sculptures must belong to the marble east front of the temple of the Alcmæonidae, and their style is that of the end of the sixth century. To the same period belong the *poros* fragments, which, however, are in high relief, and in many cases still attached to the tympanum. These include a torso of Athena in battle with a fallen adversary, Enceladus, several fragments of horses, a male figure draped and wearing the skin of some animal, part of the body of an animal, probably feline. Symmetry seems to show that the corners of the pediment were occupied by two groups; on the left Athena and Enceladus, behind the goddess her biga and an attendant, and in the corner an animal assisting her; on the right probably Dionysus, assisted by a lion, also with the empty biga, which was attended by the draped male figure. The central group, which is not preserved, must have consisted of Zeus and his opponent. All these sculptures must be dated between 520 and 490 B.C. and probably between 515 and 500 B.C. They show the influence of the friezes and pediments of the Treasury of Cnidos, and also of the contemporary Attic art. That they belonged to the pediments of the temple of Apollo is at least probable. The literary evidence will be examined in a later article.

The Sculptures from Anticythera (Cerigotto).—*Ἐφ. Ἀρχ.*, 1902, coll. 145-172 (11 pls.; 8 supplementary pls.; 19 cuts), contains a summary account of the objects recovered at Anticythera. The brief historical introduction shows that the work lasted from November, 1900, until September, 1901, with the exception of a month at Easter. The weather, however, permitted actual operations on scarcely one-fourth of the days. The wreck lay about 25 m. from the cliff, but in 25 to 34 fathoms of water. The Greek Government gave 150,000 δρ. to the men of Syme, and the Greek Archaeological Society gave those who assisted in the work 500 δρ. apiece. The article is really an illustrated catalogue of the results of this campaign. Besides the Hermes, a bearded head and three statuettes are described, as well as seventeen fragments of bronze. The marbles are for the most part badly corroded; but twenty-five pieces are described in detail, with brief mention of a number of others. The utensils and furnishings from the ship are not fully catalogued, but the chief types of pottery are noted, and also a few other objects. — In the *Pall Mall Magazine*, XIX, 1903, pp. 551-562 (11 cuts), is an interesting popular account by EDWARD VICARS of these discoveries, and especially of the process employed in the restoration of the bronze statue by André. "He first constructed a sort of skeleton on which he built up the statue piece by piece, beginning with the lower extremities. Whenever two fragments required to be fastened together, the edges were joined by very powerful cement and the pieces riveted on to a framework of copper bands, which supported and braced them from the inside." The missing parts were supplied by specially cast pieces. The rivet heads were concealed by putty and the whole coated with a bronze-color, for the process used in cleaning the fragments had left them a dull black. The writer prefers the suggestion that the figure represents Paris holding out the apple. The same view is taken by A. S. COOLEY in *Records of the Past*, II,

1903, pp. 207-213 (2 pls.), in an article based on the two accounts just mentioned. It seems clear that the right hand held some round object, and the left something rather long and slender.

The bronze statue is the subject of a pamphlet by A. S. ARVANITOPOULOS. He maintains that it is one of the best extant bronzes, belonging to the Attic School, and the period between Phidias and Praxiteles, drawing from the art of the former and preparing the way for the latter. It is earlier than the time of Scopas, but is the work of a great master, probably Alcamenes. The right hand may have held a *lecythion* or more probably was empty. The left seems to have held a strigil. This restoration as an Apoxyomenos is discussed at some length and defended by comparison with vase-paintings and on aesthetic grounds. In conclusion the processes employed in cleaning and restoring the statue are severely condemned. [*Ὁ Ἐφεύβος τῶν Ἀντικυθήρων. ὑπὸ Α. Σ. Ἀρβανιτοπούλου*, Athens, 1903, K. Maisner and N. Kargadouré, 42 pp.; 6 figs.] — The statue is also the subject of an article by C. WALDSTEIN in *The Illustrated London News*, June 6, 1903 (double-page plate). He interprets it as Hermes about to speak, and by his gesture commanding silence. The style is that of Scopas. In the proportions and treatment of the head it differs from the Hermes of Praxiteles; and though there is some resemblance to the Apoxyomenos of Lysippus, the latter is later and shows a development of the style of the bronze head. This treatment of the brow, eyes, and hair is certainly earlier than Lysippus, and is shown on the coins of Perdiccas III and Philip of Macedon. The large plate contains twenty-eight illustrations in support of this thesis, including the bronze statue, the Hermes and Apoxyomenos, and a number of heads attributed to Scopas. A fuller discussion is promised elsewhere. — Another view is developed by E. A. GARDNER in *J.H.S.* XXIII, 1903, pp. 152-156 (2 pls.). Now that the bronze athlete has been cleaned and set up, a more accurate though not final judgment of its date and artistic value can be formed. It seems to be an Hellenistic work, combining much that is good from earlier artists, but with a theatrical pose, an anatomical realism, and an absence of self-contained dignity proper to the later age. Its interest and value as an original Greek bronze are, however, very great.

Strongylion. — S. REINACH in discussing Strongylion, suggests that his work is represented by a statue of Artemis in a short tunic, found at Lesbos in 1865, and now at Constantinople. It shows some analogies to Praxitelean works, but is of a distinctly older style, which is still under the influence of the great schools of the fifth century. This agrees with the time of Strongylion, about 410 B.C., and the statement that his running Artemis in Megara was imitated by Praxiteles. (*C. R. Acad. Insc.* 1903, pp. 164-165.)

The Aphrodite of Epidauros. — In *Röm. Myth.* XVII, 1902, pp. 232-254 (4 figs), F. HAUSER discusses the interpretation and original of the Aphrodite with the sword from Epidauros. Three copies found in Italy show that it was highly valued, but these do not show the sword. Instead, in two the goddess wears a goat's skin across the left breast, under the mantle, while in the third there is no attribute. The statue of an armed Aphrodite suggests the figure dedicated by the Spartans at Amyclae after the battle of Aegospotami. The *αἰγίς* in the later copies points to the occasion for the dedication, which in the original was indicated by an inscription. Other

examples of such a use of punning attributes are known. The original is probably the Ἀφροδίτη παρὰ Ἀμυκλαίῳ καλουμένη of Polyclitus. This is the younger artist of that name, and an examination of the style of the Aphrodite agrees well with other indications as to his work. The statue from Epidauros is probably a school copy, and such a copy is easily understood at a place where the master worked so long.

The Aphrodite of Melos.—In *Chron. d. Arts*, 1903, pp. 85–87, S. REINACH discusses Furtwängler's 'Der Fundort der Venus von Milo.' He criticises sharply the views therein expressed, and maintains his own theory. The Venus is really an Amphitrite, and formed part of a group dedicated at the Klima by Theodoridas about 400 B.C. Later the Amphitrite was employed to decorate the gymnasium, and a copy of the Poseidon was erected to take the place of the original, which had doubtless been carried away by some Roman. This copy is now in the museum at Athens.

Statuettes of Aphrodite Anadyomene.—J. OFFORD and S. REINACH publish in *R. Arch.* I, 1903, pp. 233–234 (plate), a marble statuette of Aphrodite, now in the possession of C. Stuart Welles, of London, who bought it in Egypt. The arms are gone, but the attitude is that of the Anadyomene or Diadumene. Such marble statuettes, reduced copies of the works of Praxiteles and his school, are common in Egypt. This statuette is of exquisite workmanship, and cannot be later than the third century B.C. (See also *Biblia*, XVI, 1903, pp. 67–68; pl.)

Ibid. I, 1903, pp. 388–391 (pl.), S. REINACH publishes a statuette of Aphrodite Anadyomene, in the possession of the Spinks, of London. The statuette is about 3 feet high, and probably comes from Alexandria, the source of the majority of the figures of this type. The original of this group is referred to a contemporary of Lysippus, but he must have been inspired by the painting of Apelles at Cos. The frequency of these statuettes in Egypt is not merely due to the identification with Isis or to the voluptuous character of the civilization. The papyri frequently mention such images as parts of a dowry, and they seem to have been often wedding presents.

The Replica of the Aphrodite of Arles.—This statue in the Louvre, already discussed by A. MAHLER (*R. Arch.* XL, 1902, pp. 301–303; cf. *Am. J. Arch.* VI, 1902, p. 466), is the subject of an article by É. MICHOX in *R. Arch.* I, 1903, pp. 39–43. He maintains, first, that the head in the drawing by Pierre Jacques (*Album*, pl. II bis) is not on the so-called 'Providence' in the Louvre; secondly, that the head now on the Aphrodite belonged originally to that statue. The statue was found headless, and was seen in this condition by Aldroandi in 1550. It was restored before 1577, when it was drawn by Jacques. Later the original head was discovered and replaced on the statue. The statue seems to have been brought to the Louvre from Rome during the time of Napoleon. Michon calls attention to the fact that the large votive relief to Asclepius and Hygieia, dedicated by C. Pupius Firminus, has not disappeared, but has been built into the wall of the hall of the Tiber in the Louvre. The inscription (*C.I.L.* VI, 546) is almost obliterated.

The Original of the Medicean Aphrodite.—In *R. Arch.* I, 1903, pp. 33–38, A. MAHLER advances the theory that the Aphrodite de Medici is copied from a work of Lysippus. He discusses certain points of resemblance between the Apoxyomenos and other Lysippian statues and the Aphrodite.

He finds a confirmation of his theory in a passage of Lorenzo Ghiberti, describing the discovery at Sienna of a statue, which bore on its pedestal the signature of Lysippus. The description only mentions a dolphin, as the support of one leg, but adds that the nudity of the figure led to its destruction by the Siennese. This seems to indicate that it was an Aphrodite rather than the Isthmian Poseidon, as Lange believed. As the discovery was made before 1348, a forged signature is out of the question.

The Praying Boy of the Berlin Museum.—Mau's theory that this bronze represents a ball-player (see *Am. J. Arch.* VII, 1903, p. 239) is assailed by FURTWÄGLER (*Münchener Allgemeine Zeitung*, December 29, 1902, Beilage, No. 297). The calm attitude of the ephebus is wholly at variance with the tension natural in a ball-player. It is true the present attitude of the hands is inconsistent with the position of an adorant, but this is due to an incorrect restoration. A gem at Berlin shows the original position, *manibus supinis*. Furtwängler accepts Loewy's connection of the bronze with the school of Lysippus. (See *Am. J. Arch.* VI, 1902, p. 467.)

Types of Apollo.—In *J.H.S.* XXIII, 1903, pp. 117-131 (pl.; 6 cuts), P. GARDNER presents a study of the badly restored Oldfield head of Apollo in the Ashmolean Museum, which he assigns, along with the Pourtales head at the British Museum, to Roman copying of a third century Greek original, and of a much injured head found at the Mausoleum, which must be an original by one of the four great sculptors of that monument. It belongs to a colossal Apollo Citharoedus, of which the shoulder also seems to be preserved.

The identification of the Agias statue, found by the French at Delphi as a contemporary copy of a statue by Lysippus overthrows the claim of the Apoxyomenus of the Vatican to represent the style of that artist. He seems to have resembled his contemporary, Scopas, more closely than has been suspected. The figure of the Lansdowne Heracles is Lysippic, while the Apoxyomenus type is later, possibly the creation of Daippus, the son or pupil of Lysippus.

The Demosthenes of Polyeuctos.—In both the extant copies of Polyeuctos's bronze statue of Demosthenes, which stood in the Agora at Athens, the familiar statue of the Vatican, and one at Knole in England, the hands with the roll are a modern restoration. A pair of folded hands, corresponding with the ancient description of the statue, has recently been found in the gardens of the Barberini palace at Rome, and when united in plaster with a cast of the Vatican statue, fits so nearly that it evidently belongs to a third copy. A foot from this third replica has also been found in the same place as the hands. The latter, being of inferior workmanship to the foot, may be an ancient restoration. The effect of the figure is, of course, greatly improved by the proper attitude of the hands. (P. HARTWIG, *Jb. Arch.* I. XVIII, 1903, pp. 25-33; 6 cuts.)

A New Marsyas Group.—The correct interpretation of the 'Dresden Ariadne' is shown by a replica from Minturnae now in Agram. It represents a Muse (Calliope) with a *diptychon* in her left hand, seated on a rock under a tree. The resemblance to the Muse, who listens to the contest of Apollo and Marsyas on the Campana sarcophagus in the Louvre, is so close that there can be no doubt that the original of the statue formed part of a group representing the same scene. The work must belong in the Hellenistic

period. It is possible that the colossal bearded Silenus of the Villa Borghese (HELBIG, *Führer*, II, 987) and a nude Apollo with the cithara, in the Museo Pio Clementino, belong to this group. (C. HADACZEK, *Röm. Myth.* XVII, 1902, pp. 173-178; pl.; fig.)

Neo-Attic Reliefs. — In *Jh. Oesterr. Arch.* I, VI, 1903, pp. 79-107 (2 pls.; 13 cuts), F. HAUSER reconstructs from fragments in the Vatican, Uffizi, and Munich two Neo-Attic reliefs. Each contained three figures, representing respectively the Horae and Agrauidae. All the fragments were found, though at different times, in the Villa Palombara, whence came also the Massimi Discobolus and the Aldobrandini marriage. They are evidently copied from a very fine work of the Attic school, probably executed near the end of the fourth century B.C. The artistic value of the reliefs and the further use of some of the figures in the Neo-Attic work are discussed at length, and analogies in vases and reliefs of the fourth century pointed out. From the same Villa came the reliefs of the Moerae, Zeus, and Hephaestus, now at Tegel, which are reproduced on the Madrid puteal with the Birth of Athena. They correspond in size with these reliefs, and with the addition of the figure of Athena, furnish four reliefs for an altar. It is probable that they are copies of the bronze reliefs by the younger Cephisodotus, which adorned the altar of Zeus Soter and Athena Soteira in the Piraeus.

VASES

The Pottery of Cnossus. — The ceramic chapter of the Cnossian discoveries up to 1903 is published by D. MACKENZIE in *J.H.S.* XXIII, 1903, pp. 157-205 (1 pls.; 15 cuts). The strata of deposit down to virgin soil have been examined in various parts of the site, and a tolerably complete record of continuous habitation is thus obtained, back to the time of the pre-dynastic Egyptians, in the seventh millennium B.C. The most important results are the discoveries that "Mycenaean" pottery is really decadent Cretan, that glaze paint is purely a Cretan invention, and that the Attic black-figured, red-figured, and polychrome styles are modified survivals of two styles that existed side by side in Crete from the end of the neolithic period — light figures on dark ground and dark figures on light ground. The levelling of the hill, as at Ilium, for comparatively late building operations, and the existence of pavements which were kept clear of rubbish until abandoned, cause some gaps which the discovery of tombs would perhaps supply. The successive steps are roughly as follows: I. Neolithic, — hand-made pottery of blackish clay; hand-polished; incised geometric; incised geometric with white, rarely vermillion filling; rippled surface; incised white-filled naturalistic; relief naturalistic; red or buff oven-baked clay, painted in imitation of the early hand-polished ware, both plain and rippled, about 3000 B.C.; paint at first dull, becoming more and more brilliant, always of a dark color approaching black. II. Minoan, — light-colored clay, glaze-painted ware, with white, rarely vermillion, design, painted over black slip and black design on clay ground; use of yellow, orange, red, and crimson paints, producing elaborate and very artistic polychrome decoration on dark ground; wheel-made ware; relief in imitation of repoussé metal work; geometric and curvilinear designs side by side; naturalistic designs, spirals, and rosettes in imitation of fresco painting; crescent and garland designs; Cretan monochrome ware, dark design on light ground, exported

to Egypt and other Mediterranean lands; polychrome style declining because not durable; instance of monochrome in black surface leaving design in clay-color; culmination of Cretan civilization in third millennium B.C.; large vessels necessarily hand-made; floral, bird, and fish designs; highly conventionalized floral patterns, called Mycenaean; Cretan pottery in its decline spread all over Aegean; about 1500 B.C., with loss of Cretan sea-power, Cretan traditions were transferred, especially to the eastern Aegean; their influence on the western Aegean produced Attic ceramic art of the sixth and fifth centuries, with the old Cretan black-glaze technique reappearing in parallel styles, dark figures on light ground and light figures on dark ground.

A Pyxis from Eretria.—In 'Εφ. 'Αρχ. 1902, coll. 129-136 (2 pls.), B. STAIS describes a pyxis from Eretria, No. 1962 in the *Catalogue des Vases peints du Mus. Nat. d'Athènes*, by Couve and Collignon. The cover and little pyxis, which serves as a handle, are decorated with ordinary toilet scenes. The body of the vase contains a unique representation of Leto on Delos before the birth of Apollo. The goddess is seated on a stool, grasping the palm-tree. Before her stands Athena; behind are two female figures, interpreted as Artemis and Eileithyia. Beyond this group are seated, at the right Aphrodite with Eros on her lap, and at the left a similar figure, probably Amphirrite; each goddess is attended by a servant. The scene seems derived from a painting by a good artist, who was influenced by the Homeric Hymn to Apollo. The execution is rather careless. The technique is, of course, red-figured, but white, blue, and gold are freely employed.

The Α on Greek Shields.—The Α, with oblique cross bar, represented on some shields in vase paintings, was interpreted by HARTWIG (*Jh. Oesterr. Arch. I. V*, 1902, p. 169; *Am. J. Arch. VII*, 1903, p. 237) as a shield holder. P. KRETSCHMER, comparing Α on the Lacedaemonian shields, Ξ on the Sicyonian, and Μ on the Messenian, interprets Α on the shields of the hoplitedromoi as representing 'Αθηναῖοι, and on the shield of the Amazon as 'Αμαζόνες. (*Jh. Oesterr. Arch. I. VI*, 1903, Beiblatt, coll. 87-88.)

INSCRIPTIONS

An Athenian Decree from Chalcis.—The inscription from Chalcis published by G. A. PAPABASILEIOS in 'Εφ. 'Αρχ. 1902, col. 29 (*Am. J. Arch. VII*, 1903, p. 216), is certainly of Attic origin. The gods and heroes mentioned in it belong to Attica, and not to Chalcis. Among them seems to be included Heracles ἐν 'Ελαιῷ. Probably two demes, 'Ελαιεύς and 'Ελαιότις, are to be distinguished, and it is quite likely that the Heracleum in the former was identical with the τετράκομον 'Ηράκλειον, which seems to have been near the modern church of Ἅγιος Ἰωάννης ὁ 'Ρέντης. The writing also is very strongly Attic in character. That an Attic decree should be found in Chalcis is not strange, as there are many examples of similar transference; thus, Athenian inscriptions have been found in Thera, Melos, Thebes, and Corinth. (A. WILHELM, 'Εφ. 'Αρχ. 1902, coll. 135-142.)

Athenian Documents of the Fifth Century.—In *Athen. Mith.* XXVII, 1902, pp. 301-304, W. BANNIER publishes some notes on Athenian documents of the fifth century. The fragment *C.I.A. IV*¹, p. 141, No. 39a is shown to contain the heading of *C.I.A. I*, 38, a tribute list. Similarly, *C.I.A. IV*¹, p. 196, No. 116^a and I, 73 are fragments of the same proxeny decree. *C.I.A. I*, 316 and IV¹, p. 77, No. 331d belong together, and evidently contain part

of the accounts for some building. They show great similarity to those relating to the Propylaea. *C.I.A.* I, 327 seems to belong to the accounts connected with the Parthenon. *C.I.A.* I, 540 is declared the fragment of a document of the *poletae*. For *C.I.A.* IV¹, p. 124, No. 556, and IV¹, p. 23, No. 116a, partial restorations are suggested.

The Attic Archons of the Third Century.—In *Hermes*, XXXVIII, 1903, pp. 130–133, BELOCH criticises Kirchner's dating of the Attic archons of the third century (*Hermes*, XXXVII, 1902, pp. 435–442; cf. *Am. J. Arch.* VII, 1903, p. 245). He now proposes the following assignment: Diognetos, 264–63 B.C.; Antipatros, 263–62 B.C.; Arrheneides, 262–61 B.C. He defends his dating of Polyeuctos, 274–73 B.C.; Philippus, 292–91 B.C., and Diocles, 288–87 B.C.

Notes on Attic Inscriptions.—In *Hermes*, XXXVIII, 1903, pp. 153–155, A. WILHELM proposes restorations to two Attic inscriptions. In the Hecatompodon inscription the gap in line 21 should be filled *ὑπὲρ ἡμῶν παρόντας*. More than half the treasurers must be present when the treasury is opened. In the Eleusinian regulations (*C.I.A.* I, 1: IV, 1, p. 3) lines 19 ff. are restored to read, *Κέρκυκας δὲ μὴ [ἐν τῷ νέῳ μ]ύστας ἢ [ἐκ]αστον [χωρὶς, ἡ]παντ[ας κατὰ τα]ύτ[α]· ἔ[αν δὲ κατὰ] πλεῖθος, εἰθ[ύ]ν[οςθα] [. . .] αὐτ[ὸν] δ[ραχ]μῇσι.*

Inscriptions of Delphi.—The publication of the inscriptions of Delphi is continued in *B.C.H.* XXV, 1901, pp. 337–358, by M. LAURENT. The first part of the article contains three decisions in regard to disputed boundaries between cities of Achaia Phthiotis. The first, between 290 and 227 B.C., decides claims of Melitaea and Chalaë, and of Melitaea in behalf of the Pereans and Phylladonians against Peumata; the second, 229–216 B.C., refers to a dispute between Melitaea and Xynia, and contains a copy of the decision in the case of Melitaea against Perea (Ditt. *Syll.* 425); the third, of about 150 B.C., is of much greater length, and contains the agreement as to the arbitration and the decision in a dispute between Phthiotic Thebes and Halos. The documents throw some light on magistracies and on the geography of the Phthiotis, but are not sufficiently definite to make clear the exact situations of the several towns. The second part of the article contains an amphictyonic decree in honor of Callistus of Cnidus, which, by the names of the committee to convey the vote to Callistus, can be dated between 48 and 44 B.C. In that case, the *αὐτοκράτωρ* named in it must be Julius Caesar.

Ibid. XXVI, 1902, pp. 5–94 (pl.: 3 cuts), contains a further publication of accounts by E. BOURGUET. He first discusses a record of the council of Delphi in the archonship of Aristonymus, which proves, what had been before suspected, that the *ναυποιοί* drew not only upon a balance in their hands, which diminishes annually in their accounts, but also received semi-annual appropriations from the sacred treasury through the council. The inscription is discussed at some length with reference to the names of the hieronmemons and the details of the expenses given. There follows a brief discussion of the succession of archons from Cleon to Demochares, in which it is stated that Aristonymus was archon in 340–39 B.C., and Palaëus in 339–8 B.C., immediately preceding Demochares. The inscription of Elatea (*C.I.G.S.* III, 110; Ditt. *Syll.*² 141), referring to a payment by the Phocians on their fine, is dated in the archonship of Chaerolas, and with its

aid two other fragments are connected and restored. A revised reading of the payments of the Phocians (*B.C.H.* XXI, 1897, p. 322, *Am. J. Arch.* III, 1899, p. 306) is also given. The second part of the article (pp. 29-94) is occupied with the discussion of a series of fragments belonging to the accounts of the *ναυπηγοί*, in completion of the publication begun in *B.C.H.* XXII, 1898, pp. 308-328. The probable order of the fragments is first discussed, and then the text given, accompanied by a full commentary. The fragments, often of considerable length, are divided among eight slabs, and deal with expenditures connected with the completion of the temple. They contain some new architectural terms, such as *ἐπιγραφία*, probably the corner blocks of the cornice, and *προστεγαστήρα*, interpreted as a provisional roof, and throw much light on the cost of materials, and especially upon the heavy expenses connected with transportation. These fragments, taken in connection with the other accounts, show that the temple was completely rebuilt from the foundations in less than thirty-five years, that the work was interrupted during the Sacred War, and that it was renewed immediately after the peace, and pushed forward with great activity.

Ibid. pp. 246-286, contains a publication by JARDÉ of the amphictyonic decrees during the period of Aetolian domination, from 278-189 B.C., completing the series in *S.G.D.I.* 2506-2535, 2563-2568. Twenty-three documents are published, partly honorary decrees of the hieromnemons, partly votes in honor of the hieromnemons by the city of Delphi. The last contains votes relating to the right of asylum at the sanctuary of Dionysus at Teos, and corresponds in part to Le Bas-Waddington, No. 81. The chief importance of the inscriptions seems to lie in the possible chronological indications furnished by the proper names.

A Eulogy of Athens.—In *Atene e Roma*, VI, 1903, coll. 78-84, A. DE MARCHI comments upon the inscription of the Amphictyonic Council in honor of the Dionysiac artists of Athens (*B.C.H.* XXIV, 1900, pp. 92-123; see *Am. J. Arch.* V, 1901, p. 471). He thinks the praise of Athens in this decree was known to Cicero (cf. *pro Flacco*, 26, 62), and defends the Athenian claim to have originated the drama against the strictures of Colin. He is most impressed by the emphasis laid upon the moral influence of the Eleusinian mysteries, and the benefits thus conferred by Athens upon the human race. He also discusses briefly some points in the text and interpretation.

A Theban Inscription.—The inscription, *C.I.G.S.* I, 2490, is known through three published copies by E. D. Clarke, Le Bas, and Pittakis. Dittenberger has followed the version of Le Bas, who, in line 2, reads ΝΕΜ, where the others read ΠΕΜ. In the papers of C. O. Müller and Adolf Schöll are identical copies of this stone, which show that ΠΕΜ is right, and also that the first two letters at the left of the first, second, and fourth lines are additions of the copyist. It thus becomes clear that the next inscription (2491) is the missing portion of 2490. (E. PREUNER, *Athen. Mith.* XXVII, 1903, pp. 327-329.)

A Treaty from Troezen.—The fragmentary inscription from Troezen (*C. I. G. Pel.* I, No. 752 and Add.) has been recognized by A. NIKITSKY as another copy of the fragments from Epidaurus (*Ibid.* 941 A and B). His results have been published in Russian in the *Journal of the Ministry of Public Education*, October, 1902, pp. 445-467. In *Hermes*, XXXVIII, 1903,

pp. 406-413, he discusses some points connected with the interpretation and particularly the word ἀνεπιβασία. This is not otherwise known, as the earlier commentators have assumed, but occurs in a letter of Heraclitus (*Epist. Gr.* p. 288 Didot), and denotes "suspension of intercourse." The origin of this condition between Troezen and the other city seems to have been a dispute over a piece of land and the tunny fisheries in certain waters. The inscription contains part of the treaty by which this condition was to be removed, damages due to these hostilities settled, and the disputed rights determined.

A Reputed Mortgage on Works of Art.—In *Rhein. Mus.* LVIII, 1903, pp. 154-156, P. WOLTERS discusses *Greek Inscriptions in the British Museum*, IV, 1, 897, which has been interpreted as referring to a mortgage placed by the Cnidians on their works of art (cf. *Plin. H.N.* 36, 21). The text really means that the new creditors receive a second mortgage on certain receipts, on which a first mortgage is held by those who had loaned money for the erection of certain statues. Furthermore, the stone was found at Halicarnassus, and refers to the affairs of that city. It was first referred to Cnidus by Dareste (*B.C.H.* IV, 1880, p. 341), who has been followed by later commentators.

The Prytaneis at Rhodes.—In *Hermes*, XXXVIII, 1903, pp. 146-147, S. SELIVANOV maintains that there were only five prytaneis at Rhodes and not six, as is usually stated. He bases his argument on *S.G.D.I.* 3749, where only five are named. *Ibid.* pp. 147-148, F. HILLER VON GAERTRINGEN adds confirmatory evidence. In *S.G.D.I.* 3790, the third name is really in smaller letters, and is that of an adoptive father, so that there are only five names in this list. *S.G.D.I.* 3788 and 3789 are more easily restored if the college only contained five members. *Id. Ibid.* p. 320, cites an inscription in Alexandria, declared by Wilamowitz to be Rhodian (*Sitzb. Berl. Akad.* 1902, p. 1096), which also contains a list of five prytaneis.

The Inscription of Sotairos.—In *Philologus*, LXII, 1903, pp. 155-157, O. HOFFMANN returns to a discussion of the inscription of Sotairos, in answer to the criticisms of Bechtel (*Hermes*, XXXVII, 1902, pp. 631-633; cf. *Am. J. Arch.* VII, 1903, p. 241). He defends his view that Φερεκράτης (in the Ionic alphabet Φερεκράτης) is a genitive, and rebuts Bechtel's arguments to prove that in the inscription from Phalanna in the Ionic alphabet (Hoffmann, *Griech. Dialekte*, II, 13, No. 6) Νικίας, Ἰπποκράτης, and Χείμας are nominatives. All three, he maintains, are certainly genitives.

Note on a Pontic Inscription.—In *Hermes*, XXVIII, 1903, pp. 140-144, B. KEIL discusses the word ΕΚΑΤΩΡΥΓΩΝ, which appears in *Inscriptiones Ponti Euxini*, IV, 80. The nominative is not ἐκατόρυγξ but ἐκατόρυγος, shortened from ἐκατοντόρυγος (cf. ἐκατοντόρυγος, Aristoph. *Av.* 1131). The word properly denotes a measure of 100 ὀργυία or 600 feet. In the Chersonese it seems to have been used to denote the square of land originally allotted to each settler in the equal division of territory. When several of these shares were united, the original form, so far as possible, and the name were preserved. The remains of the ancient enclosing walls show that in this region the farms were square and separated by narrow roads.

Notes on Greek Inscriptions.—The inscriptions *I. G. Sic. It.* 2348 and 2347 belong together, with only about one letter missing in each line. Chababa, mentioned as a town in the Roman province of Arabia, is perhaps

to be identified with the modern Khaleb, which in a local inscription is called 'Αβυβά. *Ibid.* 2356 and 2357 belong together, but even then the obscure *ethnicon* remains doubtful. The stone-cutter seems to have had a poor copy, and in some places left blank spaces on the stone. (W. KUBITSCHKE, *Jh. Oesterr. Arch.* I. VI, 1903, Beiblatt, coll. 75-80; 2 cuts.)

Id. Ibid. coll. 80-82, maintains that [Τιβε]ρίων not [Τυ]ρίων should be read in *Inscriptiones Graecae ad res Romanas pertinentes* I, 132. The *ethnicon* of Τίρος is not Τυριεύς; that city is not known to have been called Claudiopropolis, and was not in Syria Palestina. Tiberias answers all requirements of the inscription. *Id. Ibid.* suggests that in *Arch.-Ep. Mitth.* VIII, 206, 16 the fragmentary ending should be restored [Φελο]μηλεύς.

Articles on Greek Epigraphy. — In *Rev. Et. Gr.* XVI, 1903, pp. 84-104, É. BOURGUET has collected from forty-three periodicals, chiefly of 1901, the articles relating to Greek epigraphy, and arranged them geographically. Important inscriptions are reprinted, the subjects of others briefly stated, and discussions summarized.

GENERAL AND MISCELLANEOUS

The Chronology of Mycenaean Art. — *R. Arch.* I. 1903, pp. 149-153, contains a summary by J. SIX of a paper presented by him at the Philological Congress of the Netherlands, on the dates and duration of the Mycenaean art. He states briefly the various dates assigned to such discoveries from 2000 B.C. to 720 B.C. He concludes that the Mycenaean art flourished from the eighteenth century (in Crete) until the eighth; from the ninth century it contains, however, new elements, such as appear in the Homeric poems. It was prolonged even beyond these limits by survivals in some parts of the Hellenic world. This long duration of a uniform art is not surprising in view of the length and uniformity of Egyptian and Chinese art.

Troy, Mycenae, and Central Europe. — At the February meeting of the Berlin Archaeological Society, H. SCHMIDT pointed out that the gold treasure of Troy and the third shaft-grave at Mycenae contain goldsmith's work that does not belong to the Mycenaean technique, but is European and specifically Hungarian, of the kind originating at Siebenburgen. This proves a north-south movement of Thracian civilization and puts the neolithic epoch of the Danube and the Balkan earlier than the pre-Mycenaean island-civilization of the Aegean. (*Arch. Anz.* 1903, pp. 45-46.)

The Ancient Name of Ghà. — In *Cl. R.* XVII, 1903, pp. 239-240, T. W. ALLEN suggests that the ancient name of the Mycenaean fortress in Lake Copais, now called Ghà, Glà, or Goulas, and identified by Noack with Arne, may have been Γάγχων, mentioned in the fragment of Hesiod (38 Rzsch) quoted by Strabo, p. 424.

Leucas-Ithaca. — At the January meeting of the Berlin Archaeological Society, U. VON WILAMOWITZ-MÖLLENDORF combated Dörpfeld's attempts to identify Homer's Ithaca with Leucas, and showed that the poet's notions do not fit any real island of the western sea and could not be expected to do so. (*Arch. Anz.* 1903, pp. 42-44.)

Seals of Imitation Haematite. — Certain seal-cylinders from Cyprus, which appear to be engraved in haematite, are in reality casts in a softer and more brittle substance. Analysis seems to show that this is cuprous sulphide (Cu₂S). A copper ingot from Cyprus shows the presence of sul-

phur, and the ore before reduction must have contained unoxidized sulphides. Direct smelting of surface ores containing carbonates, oxides, and some sulphide would produce copper like the ingot, and regulus like the material of the cylinders. This was seen by the Mycenaean craftsman to resemble the harder haematite, and he used it to produce easily these "shoddy" cylinders. (A. H. CHURCH, *Proceedings of the Soc. Ant. XIX*, No. 1, pp. 131-133.)

Homeric Ornaments. — In *Jh. Oesterr. Arch. I. VI*, 1903, pp. 108-122 (19 figs.), K. HADACZEK examines the 'Brooch of Odysseus, Helices and Calices' in the light of recent discoveries. After discussing the forms and uses of the *fibulae* in early Greece and elsewhere, he argues that the brooch was probably a *fibula* of which the back formed an arch (Bogenfibel), on which the animals were represented in the round. Such *fibulae* are known, and have at times the pins doubled because of the size of the ornamentation. Early terra-cottas show elaborate chains crossing the breast and evidently fastened to the *περόνια*. These are the *δέρματα*. They were attached by rings or spirals, from which sometimes hang other pendants. These pendants either from the pins or the chains are the *helices* and *calices*; the former having the shape of a twisted wire, and the latter a flower or leaf form.

The Tripods of Gelon at Delphi. — On the tripods dedicated at Delphi by Gelon and his brothers was an epigram attributed to Simonides, which, in the version in the Anthology (VI, 214) gives the total weight as 50 talents, 100 *λίτραι*. These lines have caused great difficulty, and many regard them as spurious. In reality they can only have been composed by a contemporary poet, familiar with Sicilian methods of reckoning. However Diodorus (XI, 26) says that Gelon dedicated a tripod of 16 talents, and this apparent contradiction has discredited the verses. The Sicilian *λίτρα* was probably the ancient Italian *libra*, i.e. about 273 gr. The weight of the four tripods according to the epigram was therefore about 1664 kilos. Each tripod therefore weighed 416 kilos, which is exactly the 16 talents, Attic, given by Diodorus. (Th. REINACH, *R. Et. Gr. XVI*, 1903, pp. 18-24.)

The Rhyton from Tarentum. — *Jh. Oesterr. Arch. I. VI*, 1903, Beiblatt, coll. 61-62, contains an additional note by F. WINTER on the silver rhyton from Tarentum. (See *Am. J. Arch. VI*, 1902, p. 477.) Though the work is certainly a product of the Ionian art of the fifth century, it is very possible that it was made at Tarentum, as in a number of details it is very like the Tarentine terra-cottas. The conclusion is that in the fifth century, art at Tarentum, as at other places in Magna Graecia, was under the influence of Ionian artists from Asia Minor.

A Mirror with Decorations in Relief. — In the Antiquarium at Berlin is a bronze mirror with decorations in relief, representing Dionysus with thyrsus and cantharus accompanied by a panther and followed by Pan supporting a young drunken Satyr. The Dionysus is derived from the Artemis Rospigliosi, which is in turn derived from the Artemis of Anticyra, the work of the sons of Praxiteles, executed about 300 B.C. The likeness to Nike of Samothrace is additional confirmation of Benndorf's date for the latter. The young Satyr recalls the well-known statue of the Satyr looking back at his tail. The mirror is a good example of the transfer of works in the round into relief, but differs from the Neo-Attic series in that the figures are not chosen at random, but adapted and combined with artistic feeling. (A. MAHLER, *R. Arch. I*, 1903, pp. 383-387; pl.)

A Dance by Skeletons. — The Louvre has recently been presented with a small cantharos of glazed terra-cotta with decorations in relief. The form of the vase, the decoration, the handles, and the use of two colors, brown and greenish yellow, show that it is an imitation of metal, and probably of a vase of bronze and gold. The design, which is almost perfectly preserved, is a bacchic dance by seven skeletons, who carry the nebris and thyrsos, and one of whom is posed like the Maenad of Scopas. Such dances are known in reliefs, lamps, and gems, but not on vases, for on the Boscoreale goblets and the Arrhetine fragments there is no proper dance. (E. POTTIER, *R. Arch.* I, 1903, pp. 12-16; cut.)

Protogenes. — The discovery of a line hitherto overlooked in the manuscript of Fronto, in the passage contrasting painters of opposite tendencies, restores Protogenes as the painter of *magnifica* in contrast to the *tenera* of Nealees. From other ancient references also we can see that it was the influence of Protogenes, his use of object-perspective, for instance, that characterized the subsequent so-called Alexandrian reliefs. So the Rhodian art that continued dominant down to Roman times and reappeared in Michelangelo was mainly that of Protogenes, painter and sculptor. (J. SIX, *Jb. Arch.* I, XVIII, 1903, pp. 34-36.)

The Introduction of the Metonic Cycle. — In *R. Et. Gr.* XVI, 1903, pp. 5-17, JULES OPPERT discusses the date of the introduction of the Metonic cycle. There is no foundation for the statement that this took place in the time of Alexander, when in fact Callippus introduced his reform. All the evidence is in favor of its immediate introduction in the archonship of Apseudes. The difficulties have been largely due to a corrupt passage in Diodorus (XII, 36). The words *τὴν ἀρχὴν ποιησάμενος ἀπὸ μὴδὸς ἐν Ἀθήναις Σκροφοριῶνος τρισκαίδεκάτης* are unintelligible. For *τρискаίδεκάτης* read *τρискаίδεκάτου*, and for *ἐν Ἀθήναις* a phrase like *ἐναντοῦ ἐμπροσθίου* or *ἐν ἔτει τῷ ἐμπροσθεν*. The phrase means that Meton omitted Scirophorion of the year of the previous archon, which would be necessary to bring his lunar year in harmony with the solar. The intercalary years of the Metonic cycle are 3, 6, 8, 11, 14, 17, 19. The commencement of the year of the reform falls on Tuesday, July 28 Julian, July 23 Gregorian, 433 B.C., or Pharmouthi 22, 315 in the era of Nabonassar.

The Pentathlon. — In *J.H.S.* XXIII, 1903, pp. 54-70, E. NORMAN GARDINER criticises modern explanations of the method of deciding the pentathlon, comparing the terms *τριακτῆρ*, *ἀποτριάξειν*, *ἵπακρος*, etc., and contends that with such scanty evidence as exists, especially about a practice that extended over a thousand years, it is not possible to lay down hard and fast rules, but that we must give the Greeks credit for fairness and for orderliness as those qualities are understood in the best athletic practice of to-day. He believes that the wrestling, which must have been conducted on the tournament principle, was the last of the five contests, that a first in three events gave the prize, and that some system of graduated marks for lower places must have been used when no one competitor took three firsts.

The Country Cart of Ancient Greece. — A thorough study of the ancient Greek cart, drawn from vase paintings, reliefs, terra-cotta and lead models, coins and literary descriptions, is given by Miss H. L. LORIMER, *J.H.S.* XXIII, 1903, pp. 132-151 (10 cuts). She shows it in all stages, from

the simple flat framework set on a revolving axle to the well-carpentered covered travelling coach and the racing mule-cart which appeared for a time in the Olympic and Panathenaic contests. The block wheel, fitted on a square axle-head, developed into the crossbar and the spoke wheel,—the former more common for carts, the latter for chariots,—and was finally made to revolve on a fixed axle. The pole was originally a part of the framework; the basket body and the seat were set on separately. The cart appears in rustic wedding processions, funerals, and other religious scenes. The wedding chariot of Attic vases is not realistic, but a concession to the conventions of the art.

Dynastic Law in the Hellenistic Kingdoms.—The fourth fascicle of Beloch's *Studi di Storia Antica* is a study of dynastic law among the successors of Alexander the Great. The book treats of the law of inheritance, the customs on accession to the throne, the royal costume, honors and titles, the cognomina, participation of other members of the family in the royal prerogatives, and the organization of the royal family. It contains tables showing which kings had the same cognomina, and also the cognomina and nicknames belonging to each king in Egypt, Syria, and Pergamon. (*Il Diritto dinastico nelle Monarchie dei Successori d' Alessandro Magno*, by EVARISTO BRECCIA, Rome, 1903, E. Loescher & Co., viii, 167 pp. 8vo.)

The Story of Io.—In a Doctor Dissertation of the University of Upsala, G. MELLÉN discusses the early versions of the story of Io. The earliest narrative was found in the epic *Aegimius*, attributed to Hesiod or Cereops of Miletus. The other versions in the Hesiodic Catalogue, Bacchylides (briefly), and Aeschylus are treated, and the early vases are used wherever possible. The writer holds that the story was first localized on the island of Euboea, and that the transference to Argos was effected in the Catalogue. An appendix discusses the various forms under which Argus is represented. (*De Ius Fabula Capita Selecta; Commentatio Academica, scripsit GUSTAVUS MELLÉN*. Upsala, 1901, Almqvist & Wiksell, vi, 90 pp.)

The stages of the representation of Io in art are traced by R. ENGELMANN, in *Jb. Arch. I. XVIII*, 1903, pp. 37–58 (pl. 10 cuts). The earliest, when she was simply a cow, occurs on a vase at Bryn Mawr College and on one at Naples; the next, a cow with human head, is on a vase in Boston, and corresponds with the conception of Io in the *Supplixes* of Aeschylus, where she does not appear on the stage. The change to a human form with the horns and ears of a cow, as she appears in the *Prometheus*, was probably made first by the dramatist, from necessity, but was imitated by the vase-painters.

Phobos.—In *Athen. Mith.* XXVII, 1903, pp. 253–264, L. DEUBNER discusses Φόβος, who in Greek popular belief was no mere personification, but a living and powerful divinity. This is proved by a cult at Sparta and several instances of sacrifice and invocation, among others Aesch. *Septem* 42 ff. The god was identified by Milchhöfer on a vase from Caere (*Archäologische Zeitung*, 1881, p. 286), in the form of a human trunk, with lion's head and feet, and horse's tail. Later, with the growth of superstition, Phobos appears as a "terror by night," against which charms are employed. In this sphere of belief belong two late lamps in Athens, on which is represented a bear, with the inscription Φόβος. The importance of the bear in demonology is briefly discussed, and also the custom of protecting the grave

by placing it under the care of the gods. These lamps were buried with the dead to give both light and protection in the other world.

An Ancient Sacrificial Usage.—At the November meeting of the Berlin Archaeological Society, P. STENGEL commented on the evidence found in various passages of Homer and reinforced, according to von Fritze and Brückner in "Troja und Ilion," by Hellenistic coins of Ilium, for the very ancient practice of suspending a victim from a tree or pillar before killing it for sacrifice. The object was to summon a distant or preoccupied god; or, as in *Il. XX*, 405, to please him by the loud bellowing of the frightened animal. In the *Critias*, in an elaborate description of the solemn oath of the kings of Atlantis, nine centuries before Solon, Plato shows a knowledge of this and other very ancient ritual details. (*Arch. Anz.* 1902, pp. 164-167.)

Punishments in the Greek Other World.—In *R. Arch.* I, 1903, pp. 154-200 (4 figs.), S. REINACH discusses the Greek legends of the punishments inflicted upon evildoers in the other world. He examines the stories of Salmones, Tityos, Tantalus, Sisyphus, Theseus and Pirithoüs, Oenue, and the Danaids, claiming that in all these cases the idea of punishment and often the tales of crime in this life have arisen from misunderstood representations of the dead in the other world, either as engaged in the occupations of this life or as they were at the moment of death. Thus the legend of Salmones refers to the practice of "sympathetic magic" to produce rain by imitating thunder and lightning; the punishment of Tityos is due to a representation of a dead man devoured by vultures; that of Theseus comes from a picture showing him as resting in Hades; and the Danaids were originally shown as bringing water to the wells, which their father introduced into Argos. An interesting analogy is furnished by the description in the Apocalypse of Peter of the punishment inflicted upon those guilty of unnatural lust. They are forever forced to hurl themselves from a cliff and immediately to return to the summit, only to precipitate themselves anew. This is due to the influence of a painting of Sappho at the Leucadian cliff, like the one at Trèves described by Ausonius (*Idyl VI*), and perhaps another representing the story of Timagoras and Meles (Paus. I, 30, 1). The existence of paintings or other representations of such scenes, before the time when the *Nekyia* of the Odyssey was composed, is shown to be perfectly possible by the discoveries at Crete and Phaestus.

An Athenian Nickname.—In *Hermes*, XXXVIII, 1903, pp. 265-273 (cut), P. WOLTERS discusses the name Ἐλαφόστικτος, borne by the father of Theocritus in Lysias XIII, 19. This nickname does not refer to the man as branded with the image of a stag, for it is hard to see what meaning such a brand would have. It is rather due to his wearing the painted or tattooed image as a decoration. Tattooing was common among the Thracians and other peoples, and Attic vases show Thracian women adorned with figures of animals. The father of Theocritus was then a barbarian, possibly a Thracian, who had received his nickname in Athens from the decorations which were customary in his native land. The article contains a brief discussion, with references, of branding, painting, and tattooing in ancient times. The same name is discussed by O. CRUSIUS in *Philologus*, LXII, 1903, pp. 125-132. He discusses the practice of branding or tattooing as a punishment or as a symbol of dedication among the Greeks. It is possible that the ἔλαφος had a special meaning; perhaps it denoted a runaway slave,

even as it was applied to an outlaw (Plut. *Quaest. Gr.* 39, p. 300). A similar explanation accounts for *Λαγόβιος*, given in Suidas as a proper name. The hare is a symbol of a runaway slave, and the word is a nickname for a fugitive, who lives the life of a hunted hare.

Notes on Archaeological Publications.—In *R. Ét. Gr.* XV, 1902, pp. 380–407 (18 cuts), A. DE RIDDER assumes charge of the *Bulletin archéologique*, hitherto in charge of H. Lechat. He summarizes and comments on forty-seven recent publications, chiefly in periodicals, treating of Greek Architecture and Excavations, Sculpture, Vases and Terra-cottas, Bronzes, and other works in metal. Summaries of these articles have already appeared in the *Journal*, with the following exceptions. The statue of an ephēbus in the Prado at Madrid is published by Paris in *R. Arch.* XXXIX, 1901, pp. 316–327 (2 pls.). It shows a compromise between the Polyclitan and Attic styles, and may be connected with the name of Euphranor. Mariani has described, in *B. Comm. Roma*, 1901, pp. 159–179 (4 pls.; 9 figs.), several statues recently found on the Quirinal, among them two works of the school of Pasiteles, and a replica of the head of the Diadumenos. From *Antike Denkmäler*, II, 1901, are noted, — pl. 48, a head from Pergamon, perhaps representing Alexander, and belonging to the extreme type of Pergamene art; pls. 44–45, a “Proto-Corinthian” oenochōē, with a representation of the Judgment of Paris, and non-Corinthian inscriptions; pls. 41–43, a publication in colors of paintings from three tombs at Corneto. In Furtwängler and Reichhold’s *Griechische Vasenmaleri*, pp. 102–104, Furtwängler insists that the vases signed by Euphronios as potter (*εποίησεν*) are to be distinguished from those signed as artist (*ἔγραψεν*). The former are decorated by an unknown artist. Thus the development in style attributed to Euphronios by Klein and Hartwig does not exist. De Ridder thinks that Furtwängler has seldom done a more useful piece of work than this demolition of the legend of Euphronios. In *Mon. Mem. Acad. Insc.* V, Supplement, 1901–02, pp. 133–168 (6 pls.), HÉRON DE VILLEFOSSE has published two important vases, from Boscoreale, still in the possession of E. de Rothschild, and of special interest, since they are decorated with historical subjects. (See *infra*, p. 480.)

ITALY

ARCHITECTURE

The Temples in the Forum Holitorium.—Five temples in the Forum Holitorium are known through the literature, namely, those of Janus, of Spes (both probably rebuilt at least to some extent in 212 B.C.), of Juno Sospita (194 B.C.), of Pietas (181 B.C.), and another of Pietas (150 B.C.), which was removed to make room for the Theatre of Marcellus. The temple of Janus probably lay close to the Porta Carmentalis, so that the three temples, whose remains are built into the church of S. Nicola in Carcere, are probably those of Spes, Juno Sospita, and Pietas. These temples have been minutely studied by R. DELBRÜCK in a special monograph, containing the ancient literature, a bibliography of earlier discussions, a full description of the existing remains, and an examination of the forms of the temples in general and in detail with reference to their relation to the earlier art of Etruria and central Italy, and to the contemporary art of Asia Minor. All have a high podium, but the southern temple is Tuscan, the other two

Ionic. The former, whether built by A. Atilius Calatinus about 250 B.C., or rebuilt about 212 B.C., is the work of a native architect, employing Roman workmen, and using the Italian style and technique. The two Ionic temples are somewhat younger, and their architects, though preserving the podium and deep portico, use in general the Greek forms of Asia Minor, while the Roman technique is probably due to the employment of Roman workmen. Between the earlier and later temples, therefore, occurred the great transition in Roman architecture from the Etruscan to the Greek type. The forms of the Tuscan temple were never used again, while the podium, the Hellenistic-Ionic order, and the deep portico remained common in Rome until the empire. [*Die drei Tempel am Forum holitorium in Rom*, von RICHARD DELBRÜCK; herausgegeben vom Kaiserlich Deutschen Archaeologischen Institut (Römische Abteilung). Rome, 1903, E. Loescher & Co.; 80 pp.; plan; 6 pls.]

SCULPTURE

A Terra-cotta Frieze.—In *Jh. Oesterr. Arch.* I. VI, 1903, pp. 16-31 (2 pl.; 6 cuts), P. HARTWIG publishes 'A Terra-cotta Frieze of Octavius with Athlete Statues.' The three plaques were discovered during the spring of 1902 in the Horti Sallustiani in Rome. They belong to the class of Campana reliefs representing a colonnade with vases, herms, and statues in the intercolumniations. One shows the front of such a façade, apparently with a projecting pediment; the others the more usual side view. The chief interest is in the statues, which are copies of famous works. In the centre of the pediment relief is a Heracles resembling the colossal figure in the Museo Chiaramonti. On the right are an Apoxyomenos of the type represented by the Ephesian bronze and the statuette from Frascati in the Boston Museum, and the youthful figure raising the right arm to his head, which appears on other reliefs, and has been identified with the Cyniscus of Polyclitus. The artist is right, but the figure is too old for the boy Cyniscus. On the left are two statues of bearded pugilists, whose prototypes are as yet unidentified. On one of the other plaques is a statue of Hermes with a purse in the right hand and the herald's wand in the left. It does not correspond to any known statue, but seems to belong to the school of Polyclitus. Its base bears engraved the inscription *Octavi*. This maker's name can now be recognized in fragmentary inscriptions on other Campana reliefs. The third relief shows a youthful pugilist with the palm in his right hand. It, too, seems derived from an original by Polyclitus or his school. Fragments from the same moulds as these reliefs are in various museums, and some have been already published.

The Family of Augustus on the Ara Pacis.—In *Jh. Oesterr. Arch.* I. VI, 1903, pp. 57-66 (2 figs.), A. von DOMASZEWSKI discusses the identification of the family of Augustus on the *Ara Pacis*. The scene represented is the procession at the dedication of the site, 13 B.C., not at the completion of the altar, 9 B.C. In the former year Augustus was not *pontifex maximus*, and consequently wears the *apex* as Flamen Iulianus. With Augustus on the lost slab were probably Livia, Julia, and the children, C. Caesar, Julia, and Agrippina, and then the *rex sacrorum* and *regina*. Then follow the Flamen Martialis, L. Cornelius Lentulus, and Flamen Quirinalis. The next official is Agrippa, as representative of the *pontifices*, with L. Caesar; then follow Vipsania Polla, Vipsania Agrippina and Tiberius, who was also a

pontifex. Another group is formed by Antonia minor, Germanicus, and Drusus, at that time augur, behind whom are Antonia maior, her son Cn. Domitius Ahenobarbus, and husband L. Domitius Ahenobarbus, then Frater Arvalis.

The Vases from Boscoreale.—In *Atene e Roma*, VI, 1903, coll. 97-124 (12 figs.), E. GARRICI describes and discusses some of the silver vases from Boscoreale, as published by Héron de Villefosse (*Mon. Mem. Acad. Insc.* V, 1899-1902). He regards the two goblets retained by M. de Rothschild as of special value, since they are distinctively Roman. With some differences in detail, he agrees with the editor that one represents Augustus and the other Tiberius, and thinks it very probable that the artist drew his inspiration from the reliefs of the *Ara Pacis*.

The Arch of Augustus at Susa.—The Roman arch at Susa (Segusio) commemorates the alliance of various Alpine tribes headed by King Cottius with the Roman Empire under Augustus, and its sculptured frieze represents the sacrifices and ceremonies connected with this event. The work is that of local stonecutters and in the genuine Gallic style of the period,—an art quite independent of contemporary Romano-Hellenistic tendencies, and full of quaint archaisms which go back to the sixth century and earlier in Greek development. It is independent also of Massilian influence, belonging rather to the Middle European Celtic region which had been reached through Italy. (F. STUBSICZKA, *Jb. Arch. I.* XVIII, 1903, pp. 1-24; pl.; 9 cuts.)

A Portrait of Caracalla.—The bust of a child (No. 347 in the Hall of the Busts in the Vatican) has been commonly identified with Annus Verus or Geta. It is certainly Caracalla, as is shown by its likeness to the young man represented as sacrificing in the relief on one of the inner lateral faces of the *Arcus Argentariorum* near St. George in the Velabrum. The missing figure in this relief was certainly Geta. (C. JACOBSEN, *R. Arch.* I, 1903, pp. 121-123; 2 cuts.)

PAINTING

Roman Paintings.—In *Röm. Myth.* XVII, 1902, pp. 179-231 (17 figs.), A. MAU examines a view, recently advanced by Robert and Petersen, that in the decorations of the second and third (rarely fourth) styles, the large pictures occupying the centre of the wall are not conceived as paintings supported by the architectural framework, but rather as scenes visible through a window or opening in the wall. Mau maintains his old opinion that they are paintings, and justifies it by an examination of a number of examples. He concludes that in a number of instances the decorator has clearly indicated the scene as a painting, and distinguished it from the perspective views through openings in the wall, and that in no case does this explanation meet with any real difficulty.

The Illustrated Manuscripts of Terence.—*Harvard Studies in Classical Philology*, XIV, 1903, contains two articles dealing with the illustrations in certain manuscripts of Terence. The first (pp. 37-54; 96 pls.), by K. E. WESTON, describes the miniatures in four manuscripts: (C) Vaticanus 3868; (P) Parisinus 7899; (F) Ambrosianus II 75 inf.; (O) Dunelmensis Auct. F 2, 13, Bodleian Library, Oxford. The plates contain all the illustrations to the *Phormio* in these manuscripts. The technique is carefully described, and especial attention is given to the relation of the gestures of the characters

to the statements of Quintilian. The conclusion is reached that these illustrations go back to an original series, which must be later than 100 B.C., but earlier than Quintilian, and probably represents the attitudes, dress, and gestures of Roscius and the theatre of his day, and perhaps, by tradition, the theatre of Ambivius Turpio as well. The second article (pp. 55-172) is a minute study, by J. C. WATSON, of the relation between the scene-headings and the miniatures in the manuscripts of Terence. He argues that the names in the scene-headings and the figures in the miniatures are normally arranged at the beginning of a scene in the order of the first participation of the characters in the dialogue below, except that where two characters of the same rôle do not enter the dialogue in succession these are united, and the group thus formed is given the place which the first of the characters to speak would naturally receive. This order is, however, changed where it is necessary to give a reasonably correct picture of the action. In the course of the discussion the identification of the individual figures is attempted in all cases where the order is unusual or doubtful. He concludes that the miniatures were prior to the headings, and that these were not due to the artist, but to some later person, who took the names from the text and applied them to the figures in the miniatures. The names and rôles in the headings are due to the same person, and have been transmitted together. The text of the plays and the miniatures have been transmitted together in the γ codices, but the common ancestor of this family did not have the scene-headings, which have been inserted later; in F, from a manuscript of the δ family; in the other codices, from a manuscript very similar to the Bembinus.

INSCRIPTIONS

The Capitoline Fasti.—In *Hermes*, XXXVIII, 1903, pp. 116-124. TH. MOMMSEN discusses the new fragments of the Capitoline Fasti, published by HÜLSEN in *Beiträge zur alten Geschichte*, II, 1902, p. 248. The fragments belong to 380 B.C. and 332-330 B.C. For the former year the names of nine Military Tribunes are given. This number is unknown elsewhere. It seems probable that six was the maximum, and that the few cases where eight are named are to be explained by inclusion of the censors. Here the number is due to a contamination of two lists, which agreed in five of the six names. To these seven, the two censors are added. The list of the Fasti is compared with the lists in Diodorus and Livy for this year. The article closes with notes on the individuals named in the inscription.

A List of the Salii.—*Hermes*, XXXVIII, 1903, pp. 125-129, contains a discussion by TH. MOMMSEN of the fragmentary list of the priests of the Salii (*Röm. Myth.* XVII, 1902, pp. 158-165. Cf. *Am. J. Arch.* VII, 1903, p. 247). He dates the fragment in 37 and 40 A.D., and identifies the persons named as members of the collegium. He agrees with Hülsen that the list must concern the Salii, as the members seem to be youthful patricians, and probably the Palatine branch. Another list from the years 56-64 A.D. (*C.I.L.* VI, 2002) also belongs to this body.

Proper Names from the Colosseum.—The fragments of the marble cornice of the railing which enclosed the Podium in the Colosseum contain a number of names, obviously belonging to the distinguished men who had a right to seats on this platform (*C.I.L.* VI, Add. pp. 3199-3224, Nos. 32085-32263). These names are all later than 443 A.D. and before the time of

Theodoric. Among them are Memmius Aemilius Trygetius, probably the *vir praefectorius* who accompanied Pope Leo to Attila in 452 A.D., and Memmius Aemilius Probus, probably the author, who dedicated his extracts from Cornelius Nepos to the emperor, Theodosius II. (C. HÜLSEN, *Hermes*, XXXVIII, 1903, pp. 155-158.)

The Inscription on the Column of Phocas.—In *Memorie della Regia Accademia di scienze, lettere ed arti in Modena*, Ser. III, Vol. III, 1901, Scientific Section, pp. 24-99 bis (2 pls.), PASQUALE MELUCCI discusses the inscription on the column of Phocas in the Roman Forum. His object is to defend the received view, that it was erected in August, 608 A.D., in honor of the emperor Phocas, against a recent theory that it was erected in 579 A.D., in honor of Tiberius Constantinus. He states that the remains of the second line make the insertion of this name impossible. The phrase *PC pietatis eius anno quinto* cannot mean "in the year of his consulate and the fifth of his reign," and, if it could, this date in the reign of Tiberius would fall in the twelfth and not the eleventh indiction. The phrase, *die prima mensis Augusti indict(ione) und(ecima)*, is fully discussed, as are also the Exarchates of Smaragdus in Italy, and the words *pro quiete procurata Italiae ac conservata libertate*, which could not have been used at a time when Italy was suffering from the Lombard invasion.

The Outfit of an Ancient Juggler.—*Rhein. Mus.* LVIII, 1903, pp. 317-320, contains a discussion by F. BÜCHELER of *C.I.L.* V, 2787, from the sulphur springs near Padua. A certain Q. Magurius Ferox *lusor* has dedicated *euras VIII et pertic. uncinor(um) XII*. *Lusor* denotes a juggler, in Greek *παίκτης*. *Pertic. uncinorum XII* denotes a pole (*pertica*) with twelve hooks. *Pertica* is in Greek *κορτός*, and Chrysostom describes a *κορτοπαίκτης*, who balances on his forehead a pole, from which hang various objects, including small children (cf. *Mart.* V, 12). *Euras* is probably the same word as *εὔρα* (Pollux, I, 146), and denotes the rings or chains by which objects were suspended from the hooks on the pole.

Inscriptions relating to Roman Antiquities.—In *R. Arch.* I, 1903, pp. 319-336, R. CAGNAT and M. BESNIER republish ninety-four inscriptions, of which five are Greek, relating to Roman antiquities, and add brief reference to articles and works connected with Latin epigraphy, which appeared in January and February, 1903.

GENERAL AND MISCELLANEOUS

The Topography of Acragas.—In *Berl. Phil. W.* 1903, coll. 187-190, LENSCHAU discusses some points in the topography of Acragas, in the light of the researches of Dr. Bonfiglio of Girgenti. The ancient city wall did not cross the Valle delle Cavoline, and the acropolis was the Rupe Atenea, which was originally larger than now. Recent excavations have led to the discovery of a cave near the summit, and a fine piece of an ancient wall, which may have been connected with the temple of Athena. The western part of the plateau was occupied by the necropolis, and in the north by a town on the site of the modern Girgenti. This was probably the ancient Camicus, and the same name may have been borne by the stream which must have then flowed in the Valle delle Cavoline.

The Ships of Nemi.—*Chron. d. Arts*, 1903, pp. 112-113, 120-121, contains an account, by G. L. POUREL, of the ships in the Lake of Nemi. The article

gives a brief history of the discovery of these rafts by Borghi, and the intervention of the government, by which the bronzes have come into the National Museum at Rome. The five herms are said to have a distinctive character, possessing neither the beauty of Greek nor the dignity of Roman art, but of perfect workmanship and full of life.

The Recent Excavations in the Roman Forum. — In *B. Com. Roma*, XXXI, 1903, pp. 3-239 (121 figs.), DANTE VAGLIERI gives a full account of the excavations in the Roman Forum from 1898 to 1902. After a summary statement of the plan of the work and what has been accomplished (pp. 3-16), the results are described under the following titles: the Velia (pp. 16-19); the *Sacra Via* (pp. 19-32); the early Necropolis (pp. 33-42), including an account of six tombs; the Regia, Temple of Vesta, and House of the Vestals (pp. 42-80), with a discussion of the views of Hülsen and others; the Arch of Augustus and the Temple of Caesar (pp. 81-83); the Basilica Aemilia (pp. 83-99); the Area of the Forum (pp. 99-101); the Comitium (pp. 102-151), with a bibliography and discussion of the *lapis niger* and the stele with the archaic inscription; the Rostra and Volcanal (pp. 152-164); the *Vicus Tuscus* and the Temple of Castor (pp. 164-165); the Shrine of Iuturna (pp. 166-198); Sancta Maria Antiqua (pp. 199-239). The whole article is very fully illustrated with plans and photographs. It is also published separately. (Prof. DANTE VAGLIERI, *Gli Scavi Recenti nel Foro Romano*. Rome, 1903. E. Loescher & Co.)

In *Röm. Mith.* XVII, 1902, pp. 1-97 (4 pls.; 24 figs.), CH. HÜLSEN gives a history of the excavations in the Roman Forum from 1898-1902. After a brief sketch of the course of the work, he describes in turn the results on each of the four sides of the Forum. Throughout there are constant references to the recent literature, with brief discussion and criticism of the views of Lanciani and other scholars.

Fountain of Iuturna. — In *Records of the Past*, II, 1903, pp. 174-185 (4 cuts), is a paper by Miss HELEN L. BISHOP on the 'Fountain of Iuturna in the Roman Forum.' The references to the fountain and the development of the myth in Roman literature are first discussed briefly, and then the recent discoveries on the site are described and illustrated.

The Location of the *Scalae Caci*. — Mau has recently reached the conclusion that the *Scalae Caci* did not extend into the valley of the Circus Maximus. Their continuation is rather to be sought in a cross street meeting the present remains at right angles and passing inside the fortifications at the southwest corner of the hill. In imperial times, this, like the *Clivus Victoriae* and *Nova Via*, was partly covered by the palace. Where it entered the Velabrum is uncertain. The view is supported by Hülsen, from a consideration of the places between the Palatine and Capitol, the *horrea Germaniciana*, *Victoria Germaniciana*, *Aqua Cernens IIII Scaros*, *Elephantus Herbarius*, and especially the *Atrium Caci*, which would naturally occupy a place near the stairs leading from the Palatine into the Velabrum. (F. BRUNSWICK, *Berl. Phil. W.* 1903, coll. 605-606.)

Not a Description of the Palatine. — G. B. de Rossi (*Piante iconografiche e prospettive di Roma*, p. 123 ff.) published from a manuscript of Fora a description of an ancient Roman house, which he and others have considered as an early mediaeval account of the imperial palace on the Palatine, especially of the so-called *Domus Flavia* and *Domus Augustiana*. Since 1879

other manuscripts of this document have been published, showing longer and shorter forms, and it is now perfectly clear that it has nothing to do with the topography of the Palatine or any extant building, but is simply a chapter from a Glossarium, in which the material was arranged by subjects. This chapter treated of the chief parts of a Roman house of the better class. It is published with critical notes by CH. HÜLSEN, in *Röm. Mith.* XVII, 1902, pp. 255-268.

Rock Sculptures in the Maritime Alps.—A. ISSEL reviews in *B. Paletn. It.* 1902, pp. 234-247 (7 figs.), a recent publication of C. Bicknell, entitled *The Prehistoric Rock Engravings in the Italian Maritime Alps*.

The Palette in Etruscan Tombs.—In *B. Paletn. It.* 1903, pp. 28-37 (2 pls.; 3 figs.), L. A. MILANI discusses the nature and development of the palette found in Etruscan tombs. There are two distinct types, one straight, the other concave. The chief purpose of the latter was to collect the bones and sprinkle incense. Confirmation of this theory is found in *Hor. Sat.* I, 5, 35 *catillum prunae*. A good example from Vetulonia is published for the first time.

The Metal Cestus.—The metal *caestus* described by Jüthner, 'Ueber antike Turngeräte,' p. 87, is found on a mosaic, discovered near Santa Severa in 1866. The border contains pygmy scenes, but the centre shows two pugilists plainly armed with this metal case with its projecting spike. Like the other representations of this weapon, the mosaic belongs to the late Empire. (R. ENGELMANN, *Jh. Oesterr. Arch. I.* VI, 1903, pp. 54-57; cut.)

The Relief of the Miners.—*R. Arch. I.* 1903, pp. 201-204 (pl.; cut), contains 'Notes on the Bas-Relief of the Miners discovered near Linares' by H. SANDERS. The relief has already been published, but inaccurately. The new publication is based on personal examination of the stone. It represents eight miners marching in pairs and followed by an overseer. All wear an apron and a broad girdle with large plaits. Though the surface is badly preserved, it can be seen that one miner carries a lamp and another a pick. The overseer carries a pair of large tongs, and possibly a bell.

FRANCE

The Early Gallic Religion.—C. JULLIAN in his fourth article on the early Gallic religion (*Revue des Études Anciennes*, V, 1903, pp. 19-27. See *Am. J. Arch.* VI, 1902, p. 486, VII, 1903, p. 250) considers the religious rites, especially human sacrifices, and suicide, which was so common among the Gauls that it may be regarded as a form of sacrifice demanded by the gods. This is the explanation of the advance in arms against a flood, and the refusal to leave a burning house. These acts were not the mere bravado which they seemed to the Greeks, but had a religious basis. Other topics, briefly considered, are other sacrifices, sacred banquets, libations, prayers and hymns, dances, music, vows and gifts to the gods, and the gestures used in worship. The fifth article (*Ibid.*, pp. 124-128) discusses briefly divination among the Gauls, in its various forms, from birds and animals, by lots, signs, sacrificial victims, dreams and the heavenly bodies, and through prophetic inspiration, though for this the evidence is declared unsatisfactory. The Gallic religious calendar is scarcely known. It seems clear that the months were lunar, and that certain days or nights were set apart for religious celebrations, but we have no details.

Notes on the Suessiones.—The book of Dubuc, *De Suessionum civitate* (Paris, 1902), leads C. JULLIAN to publish in *Revue des Études Anciennes*, V, 1903, pp. 28-36 (3 cuts), some notes on the Suessiones. He calls attention to the fact that the names of the rivers in their territory are generally not Celtic and are found in other countries where the Celts did not penetrate. They are now called Ligurian, and at any rate belong to the pre-Celtic population. The territory of the true Suessiones was the fertile country along the Aisne, but the testimony of Caesar shows that in his time the state controlled a more extended region than that around Soissons, though the twelve *pagi* of Dubuc are not proved to be ancient. The Romans after their conquest seem to have organized centres for popular festivals, probably at ancient shrines, and built theatres, amphitheatres, baths, and temples. An example is the amphitheatre at Senlis, which was never a large place, but was the centre for the Silvanectes. So on the border between the Silvanectes and Suessiones are the ruins of Champieu (*campus*), whose name points to it as a place of gathering. These buildings are of the first century, but the military works belong to the end of the third.

Place Names in Gaul.—In the *Revue des Études Anciennes*, V, 1903, pp. 136-138, C. JULLIAN discusses some place names. Near Bordeaux are Lormont (*lauri mons*) and Cypressat (*cupressetum*), which are marked thus as seats of sacred groves of Apollo and Diana. In Avienus 701, the conclusion of the line, *oppidum priscum Ra*, is not to be violently amended, as by Holder, but completed as *Ratis*, a town between Arles and Marseilles mentioned in ancient charters. In the *Grand Cartulaire de la Saure* occur the words *apud Burdegalum vel Boyas*. *Boyas* can only be the city of La Teste, which is thus identified with the ancient Boii.

The Terra Sigillata in Gaul.—In the *Revue des Études Anciennes*, V, 1903, pp. 37-78 (13 figs.), J. DÉCHELETTE publishes the results of a study of the *terra sigillata* of the Graufesenque (Aveyron) in the territory of the Ruteni near Millau. This deserted site was the ancient Condatomagus, and the products of its potteries were exported to Britain, Spain, Africa, Germany, and Italy. The source of these vases is proved by the discovery of the moulds at the Graufesenque. The article discusses the technique of the Gallo-Roman potters, the forms most commonly used, the ornamentation, and the date when these Rutenian potteries flourished. This pottery is distinguished by its brilliant red glaze, and a well-defined series of forms and designs, as well as by the names of a group of potters. Here also was made a rare species of glaze, yellow with red veins, apparently in imitation of marble. The industry seems to have been introduced by potters from Arrezo, at the end of the first century B.C. Between the death of Tiberius and the accession of Vespasian the Rutenian ware had acquired an important place, supplanting the now inferior products of Arrezo, and apparently holding the market until the second century. It then suddenly disappears, and is succeeded by the pottery of Auvergne, especially Lezoux, and Germany. This study of the origin of the Gallo-Roman *sigillata* is preliminary to a complete publication. *Ibid.* pp. 191-192, L. CONSTANS reports the existence of a large collection of moulds made by his father, and suggests that Graufesenque, old Provençal Graufezenca, is from *grau* = *grasan*, *grasal*, dish, and *fazenca*, $\sqrt{\text{faz}}$ + suffix *-enc*: the whole meaning "suitable for making dishes," sc. "earth," so that the name arose from the presence of the potter's clay.

The Gallic Costume. — In *R. Arch.* I, 1903, pp. 337-342, H. d'ARBOIS DE JUBAINVILLE traces the history of 'Le Pantalon Gaulois.' The ἀναγυρίδες appear in Herodotus as a garment of the Persians, and in Hippocrates as worn by the kindred Scythians. From the Scythians this Iranian garment passed to the Germans, among whom its Germano-Gallic name *braka* was formed. This is from the Indo-European *bhrag-*, and the consonants show it must have been formed among Germanic and not Celtic people. It was adopted by the Gauls as early as the third century B.C., and was carried by them into Great Britain. The Goidels of Ireland, and later of Scotland, had neither the word nor the garment until they derived both from the English. From the Gauls the Romans adopted the *bracae* during the later empire, though in 397 A.D. Honorius forbade it to be worn in Rome under penalty of exile and confiscation of property.

The Tiara of Saitaphernes. — In consequence of the doubts expressed by many archaeologists as to the genuineness of the Tiara of Saitaphernes, the authorities of the Louvre requested M. Clermont-Ganneau to make a thorough investigation. A preliminary report was made on April 6, and a final report on June 2; the latter was published in full in *Le Temps*, June 11, 1903. A personal examination of the tiara showed that it was not genuine. Furthermore, it seems to have been made by a goldsmith of Odessa, Israel Rouchomowski, from the suggestions of a certain X. [Other accounts say that X denotes one Hochmann.] According to Rouchomowski, for the lower zone, containing Scythian scenes, he was furnished two small fragments, and for the uppermost ornamental zone one as models; the designs he took from *Antiquités de la Russie méridionale*. For the central zone with the Homeric scenes he used Weisser's *Bilderatlas zur Weltgeschichte*, modifying the scenes by combination and selection, but, as it appears, sometimes reproducing errors. This band was furnished him, but originally contained only the incised inscription, which he turned into one in relief, and a simple decoration which he transformed. The three small fragments were subsequently taken from him. The question is raised whether they were genuine. Rouchomowski is doubtful, but they were badly damaged, and it seems scarcely likely that X would have taken the trouble to give them an antique appearance, considering the use to which they were put. To test the skill of Rouchomowski, he was required to decorate a plate of gold from a new design furnished him by Clermont-Ganneau, and also to reproduce from a photograph a segment of the tiara. This furnished a complete demonstration of his statement. Not only was the copy perfect, but it showed certain minute peculiarities of the original, which could only be possible if both were executed by the same hand, using the same tools, including a special die. In consequence of this report the tiara has been withdrawn from exhibition in the Louvre, though it is probable that it will later be placed in the Musée des Arts décoratifs. (*Chron. d. Arts*, 1903, pp. 101, 127, 141-142, 150-151, 187.)

AUSTRIA

The Bronze Disk with Astronomical Figures. — In *Jh. Oesterr. Arch.* I. V, 1902, pp. 196-197 (pl.), E. MAASS published a fragment of a bronze disk, bearing on the margin some of the signs of the zodiac, and on the inner surface other figures with the names of constellations, but offered no definite

explanation of its use (see *Am. J. Arch.* VII, 1903, p. 249). *Ibid.* VI, 1903, pp. 32-49 (6 figs.), O. BENNDORF, E. WEISS, and A. REHM discuss the fragment. Benndorf gives a minute description with correction of some points in the first publication. The work is probably not later than the third century of our era. Weiss describes the astronomical character of the engravings, which are by no means correct in the position of the constellations. It is noteworthy that no stars are indicated. The explanation of this unique fragment is given by Rehm, who has with great ingenuity worked out the mathematical basis on which the whole design was constructed. He shows that the original disk must have had a diameter of 1.20 m., and that it formed the inner or revolving disk of the "winter" or "astronomical" clock (*horologia hiberna* or *anaphorica*) described by Vitruvius, IX, 8, and reconstructed by G. Bilfinger. (*Die Zeitmesser der antiken Völker*, Stuttgart, 1886.)

The River Karapátr̃s.—In *Jh. Oesterr. Arch.* I. VI, 1903, Beiblatt, coll. 74-76, C. PATSCH suggests that in Pseudo-Scylax, ch. 21, the unknown *Karapátr̃s ποταμός* is the Krka, and that the name should be *Karapáktr̃s*. The cataracts in the stream must have been famous. Pliny, Ptolemy, and Florus all make the Krka the Liburnian boundary, under the name Titus, which it also bears in *C.I.L.* III, 6418.

Medaurus.—The god Medaurus, mentioned in *C.I.L.* VIII, 2581 and 2642, is not "an Illyrian Aesculapius," for he rides on a spirited horse brandishing his weapon in his right hand. He is rather to be compared with the *deus Heros* of the Balkan peninsula. As a war-god Medaurus naturally protects Risinium, and can be called the "publicus Lar" of Dalmatia. (C. PATSCH, *Jh. Oesterr. Arch.* I. VI, 1903, Beiblatt, coll. 71, 73.)

Inscriptions from Salona.—The inscriptions *C.I.L.* III, 1988 and 1989, are probably parts of the same stone, of which 1989 occupies the left side. *C.I.L.* III, 2062, which has long disappeared, is to be combined with 8747, of which now only the fragment 2069 remains. (W. KUBITSCHER, *Jh. Oesterr. Arch.* I. VI, 1903, Beiblatt, coll. 81-84.)

The Situation of Sturum.—The *Geographus Ravennas*, p. 177 f., gives the Roman stations on the road from Tyra on the Pontus to Certia (Rom-lott). It has been supposed that this road led from the valley of the Alt over the Ojtoz Pass to Moldavia, but the stations have not been identified. C. PATSCH in *Jh. Oesterr. Arch.* I. VI, 1903, Beiblatt, coll. 73-74, suggests that Sturum is a corruption for Asturum, so called from the *ala I. Asturum*, which we know was in garrison near Héviz, on the accepted line of the road.

GREAT BRITAIN

Stonehenge.—The recent excavations at Stonehenge are described by W. GOWLAND in *Archaeologia*, LVIII, 1902, pp. 37-118 (4 pls.; 29 figs.), with a note by J. W. JUDG on the nature and origin of the rock-fragments found at this time. The work was undertaken in order to place upright the 'leaning stone,' and the excavations were chiefly in the immediate vicinity of this monolith. The excavations were conducted very carefully, and a minute record is given of the exact position of every object discovered. A considerable portion of the article is given to a discussion of the methods by which these huge stones were transported and erected. This is illustrated by the methods employed in recent times in Japan, and shown in

Japanese drawings. The objects found in the excavations are held to indicate the erection of this monument near the end of the neolithic age, or at any rate before the use of copper or bronze was at all common. There is nothing to show that it was a sepulchral monument, while all the indications and analogies render it probable that it was a sanctuary for the worship of the sun. It was designed as a whole, and there is no evidence to support the tradition that the large sandstone monoliths (*sarsens*) were erected around an earlier sacred circle of "blue-stones," which in turn had been transported bodily from a distant region. As an approximate date, 1800 B.C. is suggested.

EARLY CHRISTIAN AND MEDIAEVAL ART

ITALY

The Bust at Acerenza.—In *Z. Bild. K.* XIV, 1902, pp. 17–21, R. DELBRÜCK maintains that the bust at Acerenza (see *Am. J. Arch.* VI, 1902, pp. 74, 216, 480) is certainly a work of the school of Capua in the time of the Hohenstaufens, and probably represents Frederick II. S. R. in *R. Arch.* I, 1903, p. 279, thinks this view can at any rate be discussed, though it does not seem to explain some of the peculiarities of this work. The resemblance to Frederick II is by no means convincing.

The Guilds of Florence.—The very comprehensive study of the Florentine guilds by GERSPACH is continued in *R. Art Chrét.* 1902, pp. 374–395, 463–476; 1903, pp. 32–50, 108–121. These articles are chiefly concerned with the Church of Or San Michele and treat of the medallions and sculptures on the exterior, and of Oragna's tabernacle and of the decorative frescoes in the interior. [The subject is of such general interest that it is to be hoped the articles may be published in a separate volume.—A. M.]

Paintings in a Roman Catacomb.—At the meeting of the German Institute in Rome on February 21, 1902, WILPERT discussed the paintings in two *arcosolia* of the catacomb under the Villa Massimo. Both belong to the first half of the fourth century, but have been so inaccurately published that it has been assumed they belonged originally to a heathen *hypogaeum*. In reality there is nothing pagan in the original paintings, and it is clear that they decorated the tombs of a charioteer and of a soldier's family, including a husband, wife, and boy. (*Röm. Mitth.* XVII, 1902, pp. 98–99.)

Roman Intrecci.—In *Reliq.* IX, 1903, pp. 10–21 (4 figs.), H. ELFRINGTON calls attention to the interest attaching to the Roman *Intrecci*. By this term he denotes the fragments of sculpture with interlaced patterns, whether having a spiritual meaning or merely ornamental. They are due to the guild of sculptor-architects of Rome, whose members, after the Lombard conquest of northern Italy, were known as *Maestri Comacini* and *Liberi Muratori*. These sculptures fall naturally into two divisions: those earlier than the ninth century, and those executed after that date, when the masons from Como came to Rome. The following churches contain interesting examples: S. Clemente, Sta. Maria in Trastevere, SS. Quattro Coronati, SS. Apostoli, Sta. Prassede, Sta. Maria in Cosmedin, Sta. Agnese, S. Lorenzo in Lucina, Tre Fontane, Sta. Sabina, Sta. Saba, Sta. Maria Antiqua.

Mediaeval Architecture in the Modenese Apennines.—In *Memorie della Regia Accademia di scienze, lettere ed arti in Modena*, Ser. III, Vol. III,

1901, Section of Art. pp. 3-64 (12 pls.). VINCENZO MAESTRI concludes his detailed study of churches in the Modenese Apennines. As examples of the last period of the secondary romanesque style, during the twelfth and thirteenth centuries, he describes the churches of Sta. Maria of Denzano, S. Biagio of Roncoscaglia, S. Michele of Pievepelago, S. Giulia of Monchio, S. Andrea of Bibona, and the parish church of Coscogno. The period of transition, which is distinguished from the romanesque by the presence of some characteristic elements derived from the pointed arch, accompanied by reminiscences of the Italo-Byzantine style, is exemplified in the churches of S. Vincenzo of Monte Obizzo, of S. Giovanni of Vesale, of the Nativity at Montebonello, and the oratories of S. Sebastiano of Riva and Sta. Maria ad Nives. The concluding chapter gives a summary of the buildings in this district according to periods and their relation to the architectural styles of the Aemilia.

The Bell Towers of Ravenna. — The bell towers of Ravenna and of the neighboring region form the subject of an article by O. GARDELLA in *Rassegna d'Arte*, 1902, pp. 161-168. These towers vary in form, some being round, some square, and one, at least, a combination of square and circular form. These towers were frequently assumed to date from the sixth century, when the churches with which they were connected were constructed. The author of the present article shows that large church bells were not in use until the ninth or tenth century, that these towers of Ravenna differ in construction from the buildings with which they were connected, and that their window openings are of the same general style and do not antedate the ninth or tenth century. That they could not have been lighthouses, as assumed by Venturi, is evident from their position in relation to the churches and their distance from the sea.

Mediaeval Sculpture in Sardinia. — In the town of Oristano, in the Church of San Francesco and in the Cathedral are to be found the remains of sculpture of the Pisan School, including an interesting statue of a bishop by Nino Pisano, and a number of reliefs. Here are also two Lombard reliefs of the eighth or ninth century. (DIONIGI SCANO, *L'Arte*, 1903, pp. 15-30.)

La Roccella del Vescovo di Squillace. — At Squillace in Calabria there still remain the imposing ruins of an early Christian basilica. It was constructed of brick on a Byzantine ground plan, and covered by splendid vaults, which, for the most part, have now fallen in. This basilica would seem to have been erected between the years 550-600 A.D. and in 1006 formed part of an abbey, which was suppressed in 1113. Plans and photographs of this imposing monument are given by E. CAVIGLIA in *Rassegna d'Arte*, 1903, pp. 51-57.

A Palazzo at Spoleto. — In recent descriptions of the town of Spoleto, the existence of the Palazzo della Signoria is ignored; in fact, only the substructions of this palace still exist, but these form substantial remains of fourteenth century architecture. The palace is mentioned by Servero Minervio, a sixteenth century writer, who ascribes its erection to Petrus Plancianus. Plans and views of the exterior and of the several substantial vaults of the interior are published by G. SORDINI in *Rassegna d'Arte*, 1903, pp. 6-10.

Architectural Refinements of St. Mark's at Venice. — *Memoirs of Art and Archaeology*, published by the Museum of the Brooklyn Institute of Arts and Sciences Vol. I, No. 2, (111 pp.; 14 plans; 44 cuts), is a monograph

by Professor WILLIAM HENRY GOODYEAR on the Architectural Refinements of St. Mark's at Venice. Besides calling attention to the curve in the plan of the façade and to the rising curve of the pavement, this article is concerned chiefly in proving the widening of the upper part of the nave and transepts. The intention of this may have been to correct the apparent narrowing of the nave when seen in perspective, or simply to substitute curved for straight and rigid upright lines, so as to produce a more pleasing effect. This remarkable character is found, not alone at St. Mark's, but in other churches, at Orvieto, Vicenza, Milan, Pavia, Bologna, and Arezzo. It is possibly a Byzantine invention, although not found in all Byzantine churches in Italy, and appearing in localities where Byzantine influence has not been proved. Refinements of this character were, for the most part, abolished in the Renaissance period, although a few instances of survival have been noted by Professor Goodyear.

The Castles of Verona.—In the *N. Arch. Ven.* pp. 221-258, L. MARINELLI writes on the Castles of Verona. The Castel Vecchio is illustrated as it appeared in the time of its construction; the Castel S. Pietro, as it appeared in the time of the Visconti; and the Castel S. Felice, as it appeared in the time of Sannicheli. Incidentally, the article treats also of the walls and the ancient remains of Verona.

Bronze Doors in Italy.—In *The American Architect*, No. 1407, pp. 83-84, A. MELANI writes on the bronze doors in Italy. The most important part of this article concerns mediaeval doors, which he divides into two classes: those which are decorated with incised ornament and those decorated with reliefs. The former is the earlier class and is illustrated by the doors of the Cathedral of Amalfi, the Abbey at Montecassino, S. Paolo Fuori at Rome, Monte S. Angelo at Gargano, the Cathedral of Salerno, S. Salvatore at Atrani, and S. Mark's at Venice, all of which date from the end of the eleventh century and were made in Constantinople. The doors decorated with relief sculpture were made in the twelfth century, and chiefly by three sculptors: Oderisio Berardo, Barisano di Trani, and Bonanno da Pisa. They are illustrated by the doors of the cathedrals at Troia, Trani, Ravello, Pisa, and Monreale, and by the Church of S. Bartolomeo at Benevento.

Sculpture in Wood of the Twelfth Century.—In *L'Arte*, 1903, pp. 48-59, GINO FOGOLARI writes on twelfth century wood sculpture, and publishes an extremely decorative Byzantine doorway from the Church of San Pietro at Alba Fucense, as well as cruder sculptures from the Church of Santa Maria Maggiore at Alatri.

French Influence upon Italian Sculpture of the Twelfth Century.—Albert Marignan wrote in 1899 an article entitled *L'École de sculpture en Provence du XII^e au XIII^e siècle*, and, in 1902, *Histoire de la sculpture en Languedoc du XI^e au XIII^e siècle*. In these articles his tendency is to assign later dates than have hitherto been assigned to certain well-known monuments; for example, the façades of S. Trophime at Arles, and that of S. Gilles, he places in the thirteenth and possibly fourteenth centuries. That he is wrong in this tendency is the point of view of W. VÖGE, in *Rep. f. K.* 1902, pp. 409-429, where he institutes a careful comparison between the sculptures of Provence, and those of northern Italy, especially the works of Antelami. Antelami's earliest dated work, the Deposition at Parma (1178), already shows strongly the influence of the portal sculptures at Arles.

FRANCE

The Introduction of the Crucifix into Gaul.—In *C. R. Acad. Insc.* 1903, pp. 67–70, L. BRÉHIER discusses the introduction of the crucifix into Gaul. Gregory of Tours mentions a painting of Christ on the cross at Narbonne, which was covered by a curtain in consequence of the vision of a certain priest. At the end of the sixth century, therefore, such representations were unusual in Gaul, and the nudity of the figure shocked the natives of the country. Narbonne was at this time the seat of a considerable colony of Syrian merchants, and probably this painting was made under their influence. By the eighth century the Oriental custom had overcome all opposition. (See also *Chron. d. Arts*, 1903, p. 50.)

The Origin of the Sculptures at Chartres.—The sculptures of the royal portal in the west façade of the Cathedral at Chartres have been attributed by Vöge to the same school which flourished in Provence at Arles. The chronological objection, that the portal and cloister of St. Trophime at Arles were later than the portal at Chartres, was met by Marignan, who proposed to assign St. Trophime and Chartres to the thirteenth century, and also assigned later dates to other Provençal monuments, especially the portal of St. Gilles. The whole subject has been examined in minute detail by R. DE LASTEYRIE in *Mon. Mem. Acad. Insc.* VIII, 1902, pp. 1–137 (22 pls.; 34 cuts). His work contains the following chapters: (1) 'The Royal Portal of Chartres.' These sculptures were executed between 1145 and 1194 A.D., and probably in the first half of this period. (2) 'The Portals of St. Denis, the Cathedral at Le Mans, Notre Dame at Paris, St. Germain-des-Prés,' etc. These monuments all belong to the twelfth century. The first is slightly older than the portal of Chartres, the second contemporary, the others later, probably belonging to the last quarter of the century. (3) 'The Cloister of St. Trophime at Arles.' The north gallery was already erected in 1165 A.D.; the east gallery is earlier than 1181, and the west gallery than 1221. (4) 'The Portal of St. Trophime.' This must be dated between 1180 and 1190 A.D. Its sculptures, therefore, cannot have exerted any influence on the portal of Chartres. The latter belongs rather to the new school which sprang up at the end of the eleventh or beginning of the twelfth century in Burgundy and on the upper Loire. (5) 'The Façade of St. Gilles.' This was probably finished about 1180, but part of the sculptures, notably those by Brunus, were executed about 1150. (6) 'Other Romanesque Sculptures of the Rhone Valley.' Monuments of Nîmes, Beaucaire, Romans, Maguelonne, St. Guilhem du Désert, St. Pierre de Reddes, Montmajour, belonging to this school, are examined and dated. Vöge's thesis is wrong. The Provençal school did not enter the Isle de France, and its great works are not earlier than the portal at Chartres. It was not, however, influenced by the contemporary northern school, but drew its inspiration from the school of Toulouse.

The Early Basilicas at Lyons.—In *R. Art Chrét.* 1902, pp. 445–462, 1903, pp. 96–197, LÉON MAITRE writes concerning the early basilicas at Lyons and their crypts. Plans and photographic reproductions of these interesting but sombre churches are here given.

The Church of Saint-Bonaventure at Lyons.—The art treasures of the Church of Saint-Bonaventure at Lyons, now so thoroughly dispersed,

may be known from descriptions in a very rare work published by Jean Baptiste Bazin in 1693. Extracts from this book are published by R. P. BAZIN, in *Bulletin historique du Diocèse de Lyon*, 1902, pp. 98-104 and 161-163.

Symbolism of the Façade of the Cathedral at Poitiers.—In *R. Art Chré.* 1903, pp. 129-132, X. BARBIER DE MONTAULT writes concerning the symbolism of the façade of the Cathedral at Poitiers. He claims that the northern door of the western façade symbolized death, and was used especially for funerals and baptisms. The central portal refers to the Judgment, and the southern portal may be described as the Gate of Paradise.

The Chapel of the Penitents at Roanne.—The Chapel of the Penitents at Roanne has long since been abandoned and its furniture dispersed. A description of the chapel and its furnishings may therefore be made only from documents. An attempt to give such a description of this chapel is made by Abbot PRAJOUX in *Bulletin historique du Diocèse de Lyon*, 1902, pp. 93-98.

The Atelier of Claus Sluter.—The atelier of Claus Sluter is the subject of an article by A. KLEINCLAUSZ, in the *Gaz. B.-A.* XXIX, 1903, pp. 121-134. The article describes in an interesting manner the constitution of the atelier of Sluter, and his methods of work, and gives the names of some of his assistants, without attempting to enumerate the many monuments produced by this atelier.

Early French Goldsmith Work.—Inventories and other documents inform us of superb treasures of French goldsmith work of the fourteenth and fifteenth centuries, possessed by the king of France and the princes of the House of Valois. Unfortunately, both of these treasures have disappeared. Count DURRIEU, through the study of miniatures, is beginning to recover a knowledge of some of these lost treasures. In the *B. Soc. Ant. Fr.* 1902, pp. 354-356, he publishes from miniatures, in a Book of Hours of the Duc de Berry, a fine saltcellar and an elaborate cross, both of which are described in the *Inventories of Jean, Duc de Berry*.

BELGIUM

Grotesque Animals in Flemish Manuscripts.—L. MAETERLINCK has published a volume entitled *La Satire animale dans les Manuscrits Flamands*, Ghent, 1903. The volume apparently contains a very thorough study of the use of animal forms, especially in Flemish manuscripts, if we may judge from an article on the same subject which he contributes to the *Gaz. B.-A.* XXIX, 1903, pp. 149-166. The Flemish love of the grotesque, and the freedom with which they satirize ecclesiastical and other classes, is well exhibited in the drawings with which this article is illustrated.

GERMANY

Charlemagne's Burial Place.—The controversy over the exhumation of Charlemagne has revived of late in Germany. According to ancient tradition, he was embalmed and placed in an alcove by the altar, seated upright upon his throne, a crown upon his head, a sceptre in his hand, and a gold chain about his neck, beneath the altar of the Church of the Holy Virgin, at Aix-la-Chapelle. The body is supposed to have been seen by the Emperor Otho III in the year 1000, when his crown and sword were removed,

and are preserved to this day at Vienna. On the other hand, we know from his friends and ministers, Eginhard and Thegan, that Charlemagne was buried on the day he died. It is unlikely, therefore, that he could have been embalmed in a few hours. Moreover, no alcove can be found which shows signs of disturbance. Further, the Chronicle of Cologne reports, under date 1165, that Frederick Barbarossa lifted the bones of Charlemagne out of the sarcophagus in which they had lain for 351 years. The sarcophagus is still shown to visitors, but it is far too small to have held the giant. The true facts, with regard to his burial place, remain, therefore, to be discovered. (*American Architect*, No. 1404, p. 64.)

The Church of S. John the Baptist at Worms.—Between the years 1000 and 1025, Bishop Burkard I erected at Worms the Church of S. John the Baptist. It was a decagonal building with a polygonal dome, and is much more likely to have influenced the vaulting system of the great Rhenish cathedrals than the more distant Carolingian Church at Aix-la-Chapelle. This Church of S. John the Baptist was destroyed by the French in the years 1807-1808. It is described by F. J. SCHMITT in *Rep. f. K.* 1902, pp. 321-330.

GREAT BRITAIN

The Castles of the Conquest.—In *Archaeologia*, LVIII, 1902, pp. 313-340 (3 figs.), J. H. ROUND maintains that the castles erected by the Normans at the time of the conquest are represented by the moated flat-topped mounds crowned with a palisade, the mediaeval French "motte," Latin "mota." It has been held that these were the English "burhs," erected for the most part during the Danish invasions. The article is in great part an argument against this theory, held by G. T. Clark, and adopted in general by the historians Freeman and Green. While it is not certain that all the moated mounds were erected by Normans, it is certain that very many of them occupy the sites of castles, and it is not yet proved that one of them was erected during the Danish wars. The normal type of castle till the middle of the eleventh century in England was probably the moated mound with timber palisades and moated and palisaded court or courts.

A Norman Church.—The ruined church of St. Mary at Reculver, Kent, is described and illustrated by J. RUSSELL LARKBY in *Reliq.* IX, 1903, pp. 22-32 (12 figs.). The remains of the apse are Roman, the north and south walls of the nave Norman (early twelfth century), the west front Transitional (late twelfth century), while the eastern extension of the chancel, which necessitated the removal of the apse, is Early English, belonging apparently to the thirteenth century. The Saxon building probably was of wood, with use of the Roman remains, for of this structure nothing seems to have survived the Norman reconstruction.

Norman Founts.—The Norman founts at Sculthorpe, Ingoldesthorpe, Burnham Deepdale, and Fincham, in northwestern Norfolk, are briefly described by H. BEDFORD PIM, in *Reliq.* IX, 1903, pp. 51-54 (4 figs.).

A Norman Tympanum.—In *Proceedings of the Soc. Ant.* XIX, No. 1, pp. 87-95, J. ROMILLY ALLEN describes an inscribed and sculptured Norman tympanum in Hawkesthorne Church, Nottinghamshire, which "presents a unique combination of a dedicatory inscription with a cross, figure sculpture, and elaborate geometrical ornament." The Latin inscription is in Roman capitals of the twelfth century. The symbolic sculpture is unusual,

and perhaps typifies the Adoration of the Cross. The various classes of tympana with crosses are discussed, and in conclusion a list is given of dedication stones still existing in England. These number seventeen, and extend from 685 A.D. to the fourteenth century.

A Great Seal of King Stephen.—In *Proceedings of the Soc. Ant.* XIX, No. 1, pp. 60-65 (pl.), W. H. ST. JOHN HOPE discusses a hitherto unknown Great Seal of King Stephen, found on a Rochester charter. It seems to have been made for use in Normandy. The first Great Seal of Henry III was also discussed in the light of entries in the Close Roll for the third year of his reign. It was made in 1218, by Walter de Ripa, goldsmith, who received 40 shillings, estimated as the equivalent of £160 to £200 at the present day.

The St. Albans School of Painting.—*Archaeologia*, LVIII, 1902, pp. 275-292 (4 pls.; 2 figs.), contains the first part, dealing with the mural painting, of a discussion of the St. Albans School of Painting, by W. PAGE. The earliest work at the Abbey is merely decorative, but about the beginning of the thirteenth century a school of figure painting developed, of which the founder seems to have been William of Colchester, who became a monk in 1200. During this time the fabric was in charge of the sacrist, and we find a brotherhood of art workers, religious and lay, working upon all branches of art. About the end of the century this system has given place to a lay master of the works, and the employment of specially qualified laymen for each variety of art. By the middle of the fourteenth century the local school seems to have become extinct, and the later paintings were executed by artists unconnected with the Abbey. The existing mural paintings are described and illustrated.

The Swords of Lincoln.—The *Proceedings of the Soc. Ant.* XIX, No. 1, pp. 18-31 (pl.), contains a discussion, by Col. J. G. WILLIAMS, of the three swords of the city of Lincoln. One is known as the King Richard the Second Sword, because presented in 1386 by that king; another is the Second, Lent, or Mourning Sword, so called because it was once carried before the Mayor in Lent and at funerals; the third, or State Sword, was made in 1734. The second sword is an ancient fighting sword of the fifteenth century. Examination has shown, however, that the original blade of the Richard Sword had been transferred to the new hilt in 1734, and a sixteenth or early seventeenth century blade, probably from a third sword in existence between 1676 and 1699, placed in the Richard hilt. By order of the Corporation the original blade and hilt have now been reunited.

RENAISSANCE ART

GENERAL AND MISCELLANEOUS

Goldsmith Work in Spain.—In *R. Art Chré.* 1903, pp. 19-31, Dom E. ROULIN begins the publication of a series of articles on gold and enamel objects, many of them still unpublished, which he has found in his journeys in Spain. The first article treats of Limoges enamels and shows that previous writers have not realized how many treasures of this character are still preserved in Spain. Illustrations are here given of two crucifixes in the Museum at Vich, of a crucifix of the Museum at Valladolid, and a Madonna and Child in the Church of Santa Maria at Husillos.

The Sanctuary of Po-Nagar at Nhatrang. — In the *Bulletin de l'École française de l'Extrême Orient*, 1902, pp. 19-54, H. PARMENTIER describes the sanctuary of the Po-Nagar at Nhatrang. Here are found four sacred buildings, interesting for their varied forms, for the religious importance of the sanctuary, and for the numerous inscriptions which they have furnished. The principal structure is a very elaborate creation and important for the history of Indo-Chinese architecture.

Cast of the Colleoni Statue for the Boston Museum. — The Museum of Fine Arts, Boston, has received a full-size cast in plaster of the great statue of Bartolommeo Colleoni in Venice. As the supports of the statue are no longer considered strong enough to warrant the taking of a mould from the original, the authorities of the Berlin Museum permitted the reproduction of their cast, which is one of three made fifty years ago, and the only full-size copy known to exist at the present time. (*American Architect*, No. 1404, p. 64.)

ITALY

The Tomb of Onofrio Strozzi. — In the Church of Santa Trinità, at Florence, is the sepulchral monument of Onofrio Strozzi, which on documentary grounds alone is usually assigned to Piero di Niccolò and to the year 1418. In *L'Arte*, 1903, pp. 7-14, MARCEL REYMOND shows that this monument is evidently derived from the tomb of Giovanni de' Medici by Donatello, executed in 1428. The Renaissance character of the Strozzi tomb, as well as its resemblance to the works of Donatello are cited as evidence to show that the tomb could not have been made by Piero di Niccolò, who, in 1423, executed in Gothic style the tomb of the Doge Tommaso Mocenigo in Venice. M. Reymond therefore concludes that a sepulchral slab may have been ordered of Piero di Niccolò 1418, but that it was replaced by the present imposing monument, which could not have been executed earlier than 1430.

A Renaissance Leaning Façade at Genoa. — In the *Architectural Record*, 1902, pp. 601-619, W. H. GOODYEAR discusses the leaning façade of S. Ambrogio, Genoa, also described by him in *Memoirs of Art and Archaeology*, Vol. I, No. 2. See *Am. J. Arch.* VII, 1903, p. 256.

The Casa Landriani. — The Casa Landriani, attributed to Bramante, which has recently become the property of the city of Milan, is the subject of a short article by LUCA BELTRAMI in *Rassegna d'Arte*, 1902, pp. 183-184. The attribution to Bramante is, in his opinion, incorrect, as the building dates from a period after Bramante had left Milan.

Early Work of Caradosso at Rome. — In the Church of San Pietro in Vincoli, the chains of St. Peter are preserved in a reliquary beneath the high altar. The reliquary is protected by two doors of bronze bearing the arms of Sixtus IV and Giulio della Rovere and adorned with scenes from the life of St. Peter. These bronze reliefs have sometimes been attributed to Antonio Pollaiuolo, but are now more properly assigned by A. VENTURI to Caradosso. To him are also assigned a reliquary in the National Museum at Florence and two bronze reliefs, one of which is in the South Kensington Museum and the other in the Louvre. All of these works appear to have been made in Rome and are, therefore, earlier than 1480, when Caradosso went to Milan. (*L'Arte*, 1903, pp. 1-6.)

Della Robbia Sculptures in Sicily. — In *L'Arte*, 1903, pp. 37-47, FRANCESCO LA GRASSA-PATTI publishes four reliefs of the Robbia School, all of

which are assigned to Andrea della Robbia. One is a full-length Madonna and Child in the Church of Santa Maria di Gesù at Trapani, and is an interesting addition to the catalogue of Robbia works. The other three monuments, of which one is in the Church of Santa Maria della Scala at Messina, another in the Church of San Niccolò lo Gurgo at Palermo, and a third in the National Museum at Palermo, are all replicas of previously known compositions.

The Armor of Charles V.—Of the persistent erroneous traditions which infest the history of art a notable instance is the attribution to Benvenuto Cellini of the armor of Charles V, now in the Ambras collection at Vienna. In a manuscript by Antonio Petrini, bearing the date 1643 and now preserved in Florence, it appears that the armor of Charles V was made by a certain Pirro Sirrico. JACOPO GELLI, an authority upon Italian armor, finds, in the archives of Milan, records of Pirro Sironi, a maker of armor of the early sixteenth century. Pirro, it appears, was the son of Giovanni Sironi, also a maker of armor. Gelli had already pointed out the Milanese character of the armor of Charles V in *Rassegna d'Arte*, June, 1902. If we may assume that the Pirro Sirrico of Petrini is the Pirro Sironi of the Milanese archives, the authorship and provenance of the armor of Charles V become definitely known. (*Rassegna d'Arte*, 1903, pp. 29-31.)

Classical Prototypes for Two Renaissance Tombs.—In *Rep. f. K.* 1902, pp. 401-408, F. SCHOTTMÜLLER claims to have discovered the classical reliefs which stimulated the compositions upon two Renaissance tombs. One of these is upon a sarcophagus now in the Villa Faustina at Cannes, but formerly in the Palazzo d'Aste in Rome. This relief he believes was seen by Verrocchio before he made the tomb of Francesca Tornabuoni. [The two reliefs certainly exhibit similar methods of composition, but the dependence of Verrocchio's relief upon the classical prototype does not appear clearly established—A. M.] The second relief, now in the Palazzo Montalvo in Florence, is believed to have inspired Giuliano da Sangallo when he made the tomb of Francesco Sassetti in the Church of S. Trinita.

Recent Studies on Lombard Painting of the Fifteenth Century.—Hitherto Renaissance painting in Tuscany and Venice has attracted much more attention than the paintings of the early Lombard School. Recently, however, attention is being directed to the painting and sculptures of this district. F. M. VALERI in 1902, published an important volume entitled, *Pittori lombardi del Quattrocento*. This book forms the subject of a discussion, with additions and corrections, by W. SUIDA in *Rep. f. K.* 1902, pp. 331-347; and WOLDEMAR VON SEIDLITZ contributes an article to *L'Arte*, 1903, pp. 31-36, in which he sets forth the distinguishing characteristics of Zenale and Butinone—two artists who received much attention in Valeri's book.

A Triptych of the Sixteenth Century.—*Proceedings of the Soc. Ant. XIX*, No. 1, pp. 136-140, contains notes by Lord BALCARRAS on a double painted triptych of the sixteenth century. It contains thirty-two pictures of scenes in the life of Christ or His Mother, with some 950 figures and faces. The artist was apparently a Greek, but strongly influenced by Italian, probably Venetian, types. The work itself seems to be comparatively modern, but "reproduces a version dating back to early times."

A Lost Painting by Botticelli.—In the *Burlington Magazine*, 1903, pp. 63-74, H. P. HORNE writes upon a lost 'Adoration of the Magi' by Sandro Botticelli. This painting, of which a brief notice is preserved by the 'Anonimo Gaddiano,' was in the Palazzo Vecchio, Florence. After considering various paintings of this subject, Mr. Horne concludes that the unfinished 'Adoration' by Botticelli, which was recovered from the magazines of the Uffizi and placed on exhibition a few years ago, is, in all probability, the painting formerly in the Palazzo Vecchio.

Giovanni da Bologna.—Crowe and Cavalcaselle describe a painting signed by Giovanni da Bologna, now in the Gallery at Venice, and three other paintings signed by the same author, the whereabouts of which are now unknown. A painting representing S. Christopher has recently been discovered by A. MOSCHETTI in the Civic Museum at Padua. Giovanni da Bologna has been regarded as a painter representing the Bolognese School of the fourteenth century. His paintings, however, appear to have emanated from Venice, and Moschetti points out their correspondence in style with those of Lorenzo Veneziano. He may, therefore, more properly be classed as a Venetian painter of the fourteenth century. (*Rassegna d'Arte*, 1903, pp. 36-39.)

Alunno di Domenico.—The *Burlington Magazine*, I, 1903, pp. 6-20, contains an article by BERNHARD BERENSON, entitled, 'Alunno di Domenico.' This title, indicating a disciple of Domenico Ghirlandajo, is given to the author of a number of paintings and engravings. Mr. Berenson maintains that the 'Massacre of the Innocents,' which forms part of the large 'Adoration of the Magi,' painted by Ghirlandajo in 1488 for the Church of the Innocenti, is not by Ghirlandajo's own hand, but by a pupil of his, who seems also to have made the *predelle* to this altarpiece. Other *predelle* to Ghirlandajo's altarpieces are found to be by the same hand, also several *casone* panels and a series of interesting wood engravings which illustrated early Florentine books. Dr. Ulmann has, in a measure, anticipated Mr. Berenson in recognizing the works of this painter and would identify him with David Ghirlandajo. The style, however, indicates a man who was influenced not only by Domenico Ghirlandajo, but quite as much by Botticelli and Piero di Cosimo. A recently discovered document indicates that the painter of the *predelle* of Ghirlandajo's altarpiece in the Innocenti bore the name Bartolommeo di Giovanni.

Giovanni Francesco da Rimini.—In further elucidation of the work of this artist (see *Rassegna d'Arte*, 1902, pp. 134-135; *Am. J. Arch.* VII, 1903, p. 259), C. RICCI publishes in *Rassegna d'Arte*, 1903, pp. 69-70, two more paintings, a 'Madonna Adoring the Child,' in the Gallery at Bologna, and a 'Baptism of Christ,' in the Blumenstihl collection in Rome. In these paintings may be recognized the influence of Benedetto Bonfigli.

Notes on Vincenzo Foppa.—In the Museum of Berlin there is a painting of the 'Deposition,' ascribed in part to Foppa. In fact, the painting is signed, on the border of the garment of Nicodemus, *Vincentius de Phop pinxit*. This signature is probably of later date than the painting. Nevertheless, the style of the painting, in many details, is identical with the 'Adoration of the Shepherds' in the National Gallery at London and with that of the 'Madonna with Saints' in the Brera at Milan. The painting is attributed entirely to Vincenzo Foppa by C. J. FOULKES in *Rassegna d'*

Arte, 1902, pp. 168-173. The painting is identified with that described by Albuzio in the Church of S. Pietro in Gessate in Milan at the end of the eighteenth century, and was probably painted about 1495, when Foppa was an old man.

The testimony of Zamboni that the inscription on Foppa's tombstone records his death in 1492 has been unhesitatingly accepted by art historians, but some of Foppa's paintings are of later date than this; hence a hypothetical personage called Vincenzo Foppa, the younger, has been created. C. JOCELYN FFOULKES has recently devoted considerable study to the paintings and bibliography of Vincenzo Foppa, and has made researches in the archives of S. Alessandro at Brescia. These archives are well preserved, and indicate that Vincenzo Foppa was alive for some years after 1492, and that his death must have occurred between May 31, 1515, and October 16, 1516. (*Burlington Magazine*, 1903, pp. 103-121.)

Titian's Sacred and Profane Love.—In *Rassegna d' Arte*, 1902, pp. 177-181, UMBERTO GNOLI writes of Titian's celebrated painting in the Borghese Gallery. I. M. PALMARINI in the *Nuova Antologia*, August, 1902, had designated the subject of this picture as the 'Fountain of Ardena,' basing his interpretation on Boiardo's *Orlando Innamorato*, Part I, Canto III, 31 ff. This interpretation Gnoli holds to be without sufficient foundation. He adheres to the interpretation given by Wickhoff in 1895 and followed by Claude Philipps in his 'Earlier and Later Work of Titian,' 1897 and 1898, that the painting represents Venus persuading Medea to rejoin Jason—the classical myth elaborated in the *Argonauticon* of Valerius Flaccus and the *Metamorphoses* of Ovid. A writer in the *Frankfurter Zeitung* (February 4, 1902), announces that in an edition of the *Argonauticon* of Valerius Flaccus, Paris, 1550, the frontispiece is the Borghese painting with the subscription, 'Venus persuading Medea to fly with Jason.' The coat-of-arms on the picture Gnoli finds elsewhere with the title 'Aurelio,' and recalls the fact that Nicolo Aurelio was Grand Chancellor in Venice in 1523.

In *Rassegna d' Arte*, 1903, pp. 40-43, I. M. PALMARINI replies to Gnoli's article, that if the subject of this painting be derived from the *Argonauticon* of Valerius Flaccus, then Venus should appear in the guise of Circe clad in a peculiar costume and making her appearance to Medea in a closed room, not in the open country, and that Medea herself should have been indicated by some characteristic symbol. On the other hand, the subject indicated by Palmarini, namely, the 'Fountain of Ardena,' or 'Fountain of Love,' corresponds more closely with descriptions in the Boiardo's *Orlando Innamorato*. In *Rassegna d' Arte*, 1903, p. 74, Gnoli maintains his previous position against the criticism of Palmarini. In the *Nation*, July 2, 1903, pp. 9-10, is a letter by Gnoli stating his view in detail. He says he has not been able to find the Paris edition of the *Argonauticon* with this picture. (See also letters from Miss T. PECK and R. GARNETT in the *Nation* for October 15, and November 12, 1903, in criticism of Palmarini.)

Canova and the Tomb of Alfieri.—The splendid tomb by Canova, erected to Alfieri by the Countess of Albany, is well known to visitors to S. Croce, Florence. The correspondence between Canova and the Countess of Albany concerning the design of this tomb and the modifications before it reached its final form has been preserved and is published in *N. Arch. Ven.* 1902, Nos. 45, 46, and 47.

FRANCE

Types of Old Paris Houses.—In the *Burlington Magazine*, 1903, pp. 84-100, ROSE KINGSLEY and CAMILLE GRONKOWSKI begin a series of four articles on 'Important Old Houses of Paris.' The first article treats of the Hôtel Lauzun, the apartments of which were elaborately ornamented in the Louis XIV period.

An Italian Manuscript in the Bibliothèque Nationale.—In the *Gaz. B.-A.* XXVIII, 1902, LÉON DOREZ wrote concerning a manuscript which contained drawings apparently copied from the works of Leonardo da Vinci. In the *Chron. d. Arts*, 1903, p. 20, GEORG GRONAU shows that these drawings are based upon various monuments, not merely paintings, but drawings and medals by various authors. He believes they cannot have been executed before the seventeenth century.

Early French Renaissance Wood Carving.—At a meeting of the *B. Soc. Ant. Fr.*, held November 19, 1902, J. B. GIRAUD presented a paper on a *coffre de mariage*, dated 1512, which he considered a work of the School of Lyons. M. VITRY, however, compares it with a fine marriage chest, formerly at the château of Azay-le-Rideau, and concludes that its attribution to the school at Lyons is not proved. Both of these examples of early French Renaissance wood carving, however, reveal Italian influence. (*B. Soc. Ant. Fr.* 1902, pp. 324-325.)

Two Miniatures by Jean Fouquet.—The French art of the fifteenth century has recently attracted considerable attention, especially the work of Jean Fouquet. PAUL DURRIEU has been making a special study of the miniatures of this artist, on which subject he expects to publish a volume. He publishes two inedited miniatures by Jean Fouquet, now in the Bibliothèque Royale of The Hague, in the *M. Soc. Ant. Fr.* LXI, pp. 105-123. One represents a 'Madonna,' and the other a 'Crucifixion.'

Portraits of Louis XI.—Since the publication of a miniature of Louis XI by Jean Fouquet in the *Gaz. Arch.* 1889, much has been written on the portraits of Louis XI. In the *Gaz. B.-A.* XXIX, 1903, pp. 213-227, H. BOUCHOT contributes an article on the portraits of Louis XI. After mentioning several portraits derived from Jean Fouquet's miniature, he publishes a medal by Francesco Laurana, which represents the king when about forty years of age; also a drawing in the library at Arras, which represents him about twenty-three years of age. This appears to have been copied from a painting by Rogier van der Weyden. The Museum at Berlin also possesses a drawing which Bouchot recognizes as a representation of Louis XI by a Burgundian artist.

A Portrait of a Duke of Bourbon.—The Museum of Roanne has recently acquired a fine portrait of Duke Charles III of Bourbon (1489-1527). The painting was found at Moulin about fifty years ago by Valentine Smith, and has often been exhibited. It is briefly described and reproduced by J. DÉCHELETTE in *R. Arch.* I, 1903, p. 281 (cut).

Pierre Julien.—One of the first of French sculptors to devote his energies to the modern revival of classic subjects and forms in sculpture was Pierre Julien, born in 1731, died in 1801. Hitherto biographical notices of his life and works have been founded upon the *Notice historique sur la vie*

et les ouvrages de Pierre Julien, published by J. Le Breton in 1805. A more thorough study of his biography and of his works has been undertaken by A. PASCAL in *Gaz. B.-A.* XXX, 1903, pp. 325-342.

BELGIUM

Early Flemish Painting.—The history of Flemish painting begins with the famous altarpiece of the 'Mystic Lamb' at Ghent, bearing the date 1432, and painted by Hubert and Jan Van Eyck. As Hubert Van Eyck died in 1426, his share in this altarpiece has furnished a problem not yet solved. In the *Gaz. B.-A.* XXIV, pp. 215 and 474, W. H. JAMES WEALE wrote upon Hubert Van Eyck and assigned to him a number of paintings. A contribution to the early history of Flemish painting has recently been made by PAUL DURRIEU, who writes in the *Gaz. B.-A.* XXIX., 1903, pp. 1-18, 107-120. He has made a special study of the miniatures contained in a Book of Hours, the greater part of which is now in the National Library at Turin, parts of which are in the collection of Prince Trivulzio at Milan, and others in the Louvre and in the private collection of Mme. la Baronne Adolphe de Rothschild. These miniatures were made for Jean, Duc de Berry, and William IV, Count of Holland and Hainaut, prior to the year 1417. The historic and artistic analogies are so striking between these miniatures and the paintings of the Van Eyck brothers, that M. Durrieu is inclined to attribute the miniatures to one of them. The Société de l'Histoire de France and the École des Chartes in 1902 issued reproductions of these miniatures, but, as this publication was privately printed, all lovers of Flemish painting will be grateful to M. Durrieu for having published some of them in the *Gaz. B.-A.*

A series of articles on the early painters of the Netherlands, as illustrated by pictures recently exhibited at Bruges, is being published by W. H. JAMES WEALE in the *Burlington Magazine*. The March and April numbers each contain an article. They are full of detailed information, beautifully illustrated, and form a valuable record of this important exhibition.

The Brothers Van Eyck.—In *Athen*, February 28, March 14, 21, 28, 1903, the discussion as to the collaboration of Hubert and Jan Van Eyck in certain pictures is continued by ALFRED MARKS and W. H. JAMES WEALE (see *Am. J. Arch.* VII, 1903, p. 251). To the evidence from southern plants and fanciful architecture, the former now adds a flight of birds flying in converging lines, which he regards as a sort of cipher of Jan. The latter insists that chronological evidence makes any collaboration between the brothers impossible after 1422.

The Painting of the Chancellor Rolin with Saints.—The Louvre contains a painting from Autun, usually attributed to Jan Van Eyck, and interpreted as the 'Chancellor Rolin worshipping the Virgin and Child.' This has been considered by Weale as more probably a work of Hubert Van Eyck. Recently H. BOUCHOT (*R. Art Anc. Mod.* I, 1903, pp. 21-22) has maintained that the work must have been executed after the death of Van Eyck, and cannot represent Rolin. In *R. Arch.* I, 1903, pp. 279-280, S. R. declares against this view. The painting certainly belongs to the Flemish School, and very probably represents Rolin.

The Book of Hours of Pope Alexander VI.—In the *M. Soc. Ant. Fr.*, Vol. 61, pp. 219-229, Comte COURET writes concerning a Book of Hours

now in the Musée historique d'Orléans. This manuscript, besides being a splendid example of calligraphy, is of interest because of the beautiful miniatures executed by the Flemish painter, Gérard David. The coat-of-arms of Pope Alexander VI on the cover having been called in question, the present article is a plea for its genuineness.

The Warwick Manuscript.—In the *Burlington Magazine*, 1903, pp. 151-164, Sir E. MAUNDE THOMPSON contributes an article entitled 'The Pageants of Richard Beauchamp, Earl of Warwick, commonly called the Warwick Manuscript.' This manuscript is illustrated by a series of fifty-three drawings of certain episodes in Beauchamp's career. These drawings are described and four of them reproduced. The style of the drawings indicates a Flemish draughtsman. The suggestion is here made that these drawings, perpetuating the gallant deeds of Richard Beauchamp, were probably ordered by Anne, Countess of Warwick, the youngest daughter of the Earl.

Flemish Paintings on a Rood-screen.—The remains of the rood-screen of Tacolneston Church, Norfolk, are described by E. F. STRANGE in *Proceedings of the Soc. Ant.* XIX, No. 1, pp. 142-146. The chief interest is in the paintings in tempera on two panels, representing an 'Annunciation' and a 'Temptation of St. Anthony.' The latter is an exact reproduction of the engraving by Lucas van Leyden. The former is not yet identified, but clearly belongs to the Flemish School of the late fifteenth century. The framework of the panels is richly ornamented in colors and gilding, but there is nothing to suggest that it is not the work of English craftsmen. The panels are clearly Flemish, and perhaps by Lucas van Leyden himself. The church was rebuilt about 1503 and the engraving of St. Anthony is dated 1509.

The Maître d'Oultremont.—In the Museum at Brussels there is a fine triptych, assigned to the Maître d'Oultremont without further identification. Recently, however, Gustave Glück and Camille Benoit have identified the 'Portrait of a Man,' No. 538, in the Museum at Brussels, with a portrait described by Van Mander, painted by Jan Mostaert. A series of portraits have, accordingly, recently been assigned to this master. The affinity and style between the triptych and portraits are so great that E. DURAND-GRÉVILLE, in *Chron. d. Arts*, 1903, pp. 4-5, identifies the Maître d'Oultremont as Jan Mostaert.

A Painting by K. D. Kauninck in the Museum at Ghent.—There has recently been discovered in the Museum at Ghent an interesting painting signed by K. D. Kauninck. In *Chron. d. Arts*, 1903, p. 60, L. MAETERLINCK interprets the painting as representing S. Geneviève, as the protector of the City of Paris. Maeterlinck believes the painter to be unknown, but recognizes in his style affinities with that of Jan or Hans Bol of Malines, and Jan van Rillaert of Louvain. He believes, therefore, that the painting was made in Flanders for a Frenchman at the end of the sixteenth century.

In *Ibid.* p. 69, H. HYMANS says that he called attention to this picture in his little volume *Gand et Tournai*. He notes that the Museum of Cologne contains a painting by the same artist signed, K. D. Kauninck, also that Brockhaus, of Leipzig, possessed another work by the same painter. Who K. D. Kauninck was is shown by G. GLÜCK, *Ibid.* p. 96. He is mentioned in the *Liggeren* of the Guild of S. Luke at Antwerp, under the name Cer-

stiaen (or Kerstiaen) *de Coninck, schilder van Cortryck*. His first name is the equivalent of Christian. Christian de Coninck, it appears, was a native of Courtrai, was admitted to the Guild of S. Luke at Antwerp in 1580, and may there have been influenced by the work of Hans Bol. His name is mentioned as late as 1630. He had a son, also named Christian, who died in 1643. The Royal Gallery of Vienna possesses a large landscape inventoried, in 1659, as the work of Christian Koninck, painter, from Antwerp. Whether this latter painting was by the father or son cannot now be determined.

Brueghel, the Elder.—In *Rassegna d' Arte*, 1903, pp. 49–51, G. LE BRUN treats of the elder Brueghel, and publishes two paintings by him in the Museum at Naples. One of these is the striking picture of 'The Blind Leading the Blind'; the other, a medallion representing the 'Robbing of a Monk.'

GERMANY

Recent Works on Albrecht Dürer.—In the *Gaz. B.-A.* XXIX, 1903, pp. 59–78, MAURICE HAMEL reviews a number of books and articles recently written upon Albrecht Dürer. These are: Auguste Marguillier, *Albert Dürer*, Paris, 1902; Berthold Haendcke, *Die Chronologie der Landschaften Albrecht Dürers*, Strassburg, 1899; Paul Weber, *Beiträge zu Dürers Weltanschauung*, Strassburg, 1900; W. Suida, *Die Genredarstellungen Albrecht Dürers*, Strassburg, 1900; L. Justi, *Konstruierte Figuren und Köpfe unter den Werken Albrecht Dürers*, Leipzig, 1902; and the articles of M. H. Thode in the *Jb. Preuss. Kunsts.* 1891, 1893, and 1901.

The Proportions of the Human Body.—Albrecht Dürer's study of the proportions of the human body is made the basis of a study on this subject by CONSTANTIN WINTERBERG. The first installment is published in *Rep. f. K.* 1903, pp. 1–19.

Hans Sebald Beham.—In the *Burlington Magazine*, 1903, pp. 189–201, CAMPBELL DODGSON writes concerning Hans Sebald Beham. This article draws especial attention to Gustav Pauli's recent catalogue of the copper plate engravings, etchings, and woodcuts by this artist, and contains a number of illustrations of his work.

A German Plaque in the Louvre.—Since 1856 the Louvre has possessed a plaque which formed part of the gift of Ch. Sauvageot. In the catalogue of this collection made by M. Sauzay in 1861, and in the catalogue of Clément de Ris made in 1873, this plaque has been strangely misunderstood and its inscriptions misread. A careful study of the plaque by J. J. MARQUET DE VASSELLOT shows that the plaque represents part of a composition concerning the Prodigal Son, and that the inscription comes from the Gospel of St. Luke xv. 13. The date of the plaque had been assigned to the years 1515 and 1615. It now appears to have been copied with slight modifications from an engraving of Hans Sebald Beham, made by him in 1540. The plaque doubtless may be attributed to the last half of the sixteenth century. (*Chron. d. Arts*, 1903, pp. 11–12.)

GREAT BRITAIN

Miserere Stalls at Thanet.—In the Church of St. Mary, Minster, in Thanet, Kent, are eighteen miserere stalls of the early fifteenth century. They are of oak, quaintly carved, and are fine examples of mediaeval work.

The subjects selected for the decoration of the seats are of the usual type, often humorous and slyly satirical. Eighteen stalls now exist, but it is probable that there were six more, and that the original positions have been somewhat altered. (H. PHILIBERT FEASEY, *Reliq.* IX, 1903, pp. 55-61; 8 figs.)

The Evolution of Form and Decoration in English Silver Plate. — In the *Burlington Magazine*, 1903, pp. 167-179, PERCY MACQUOID publishes the first part of an article on 'The Evolution of Form and Decoration in English Silver Plate.' The article is well illustrated with reproductions of mazer cups, shell and wine cups, tankards, beakers, and standing cups of the fifteenth and sixteenth centuries.

Old Sussex Pottery. — In an article in *Reliq.* IX, 1903, pp. 1-9 (10 figs.), W. HENEAGE LEGGE publishes some examples of Romano-British ware and a fragment of a mediaeval jug, though most of the article is concerned with Sussex ware of the eighteenth and early nineteenth centuries.

